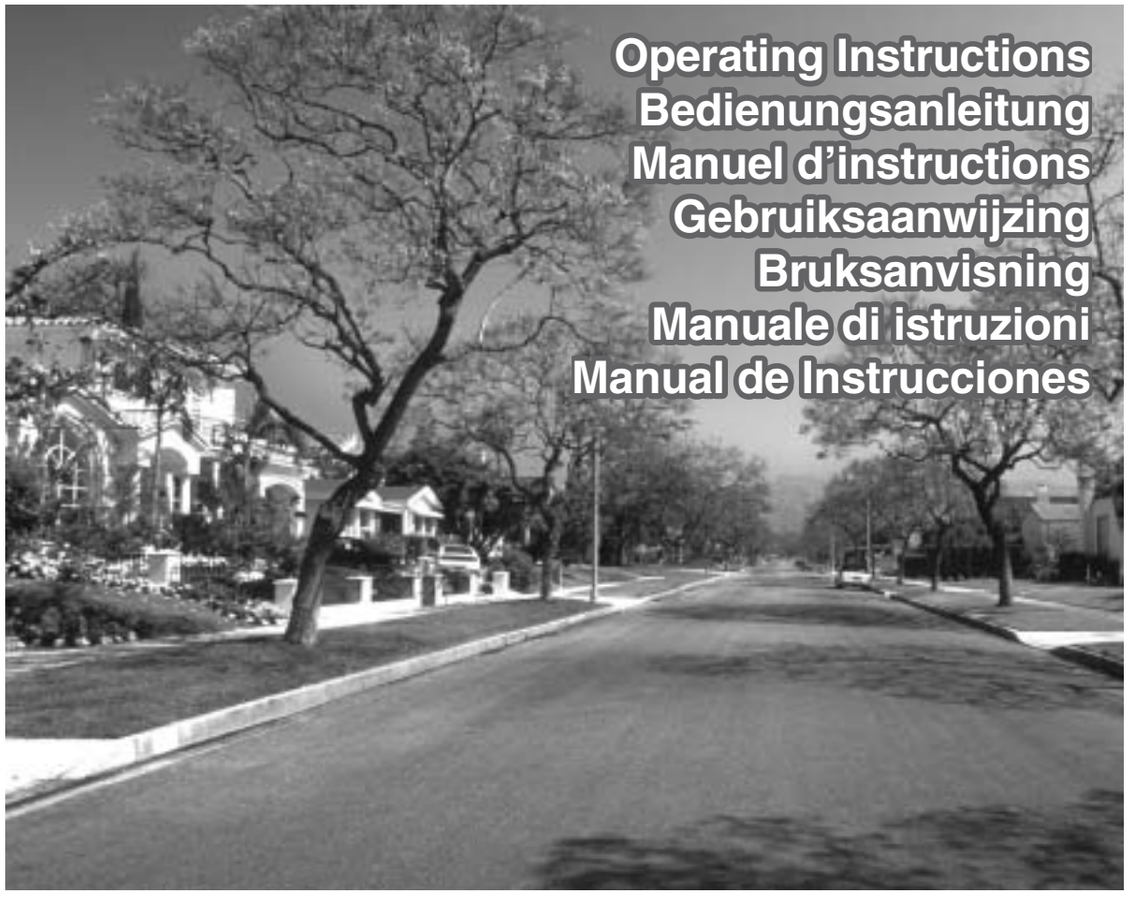
Panasonic

In-Dash 7” Widescreen Color LCD Monitor
with RDS Receiver and CD Changer Control

CQ-VA7300N



- Please read these instructions carefully before using this product and keep this manual for future reference.
- Bitte lesen Sie diese Bedienungsanleitung vor der Verwendung dieses Produktes aufmerksam durch und bewahren Sie sie danach für spätere Nachschlagzwecke sorgfältig auf.
- Prière de lire ces instructions attentivement avant d’utiliser le produit et garder ce manuel pour l’utilisation ultérieure.
- Leest u deze instructie alstublieft zorgvuldig door voor u dit product in gebruik neemt en bewaar deze handleiding voor later gebruik.
- Läs igenom denna bruksanvisning noga innan produkten tas i bruk. Spara bruksanvisningen för framtida behov.
- Si prega di leggere attentamente queste istruzioni prima di usare questo prodotto e di conservare questo manuale per usi futuri.
- Lea con atención estas instrucciones antes de utilizar el producto y guarde este manual para poderlo consultar en el futuro.

Matsushita Electric Industrial Co., Ltd.
Web site: http://www.panasonic.co.jp/global/

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Panasonic welcomes you to our ever growing family of electronic product owners. We know that this product will bring you many hours of enjoyment. Our reputation is built on precise electronic and mechanical engineering, manufactured with carefully selected components and assembled by people who take pride in their work. Once you discover the quality, reliability, and value we have built into this product, you too will be proud to be a member of our family.

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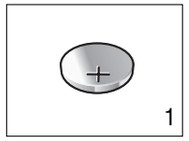
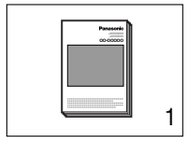
Accessories

1
Remote Control Unit


1
Lithium Battery (CR2025)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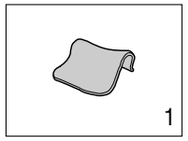
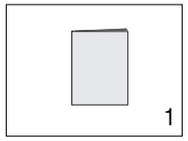
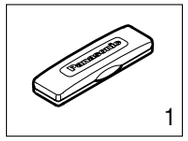
Operating Instructions


1
Wiping Cloth


1
Warranty Card


1
Removable Face Plate Case

Supplied Hardware (➡ page 43)

Features

7-inch wide LCD (Liquid Crystal Display) display
Delivers images of high quality and superb color reproduction.

Small sub-LCD display
A small display is equipped on the front side of the control unit.

Removable face plate
This serviceable mechanism allows you to protect your valuable system from theft.

Fully powered display positioning mechanism
Positioning of the display unit is fully power driven. This includes extending the unit, raising it to upright position, adjusting its vertical (tilt) angle.

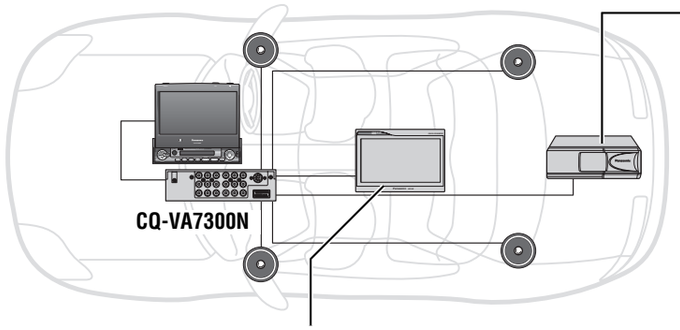
GUI (Graphical User Interface)
GUI displays various indications with colorful symbols to enhance visibility, enjoyment, and operability.

Built-in automatic dimmer
The brightness of the screen is automatically adjusted in response to surrounding brightness.

CD Changer/Video CD Changer control function
CD Changer (CX-DP880N, CX-DP9061EN, option) and Video CD Changer (CX-VCD10AEW, option) can be connected.

Private Mode (P • MODE)
You can connect another monitor for rear seat (CY-VM1500EX, option) and mute the sounds from the rear speakers (Private mode). Activation of the private mode allows you to enjoy the front and rear monitor independently with different sources at the same time.

System Upgrade
This unit can be combined with other components to make systems like those shown below.



CD Changer:
CX-DP880N, CX-DP9061EN (option)

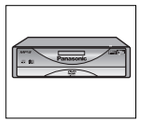
Video CD Changer:
CX-VCD10AEW (option)
- Refer to "**Connection with Video CD Changer**" and "**Connection with Dual CD Changer Selector**" (➡ page 56, 57).

Note: Dual CD Changer selector (CA-CD55EN, option) allows simultaneous connection of two CD Changers. (➡ page 57).

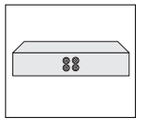
Rear Monitor: CY-VM1500EX (option)
- Refer to "**Connection with Rear Monitor and Camcorder**" (➡ page 54)

Car Navigation System:
CN-DV2300N (option)
- Refer to "**Connection with Car Navigation System**" (➡ page 58)

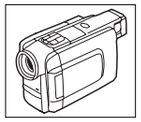
Car Navigation System:
CN-DV2000EN (option)
- Refer to "**Advanced System 1**" (➡ page 60-61)



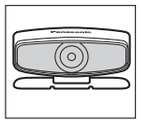
DVD Player:
CX-DVP292, CX-DV1500PEN (option)
- Refer to "**Connection with DVD Player**" and "**Advanced System 2**"(➡ page 59, 62-63)



TV Tuner:
CY-TN1500PEN (option)
- Refer to "**Advanced System 1**" (➡ page 60-61)



Camcorder (option)**:**
- Refer to "**Connection with Rear Monitor and Camcorder**" (➡ page 54)



Rear View Camera (option)**:**
- Refer to "**Connection with Rear View Camera**" (➡ page 55)

Precautions

WARNING:

TO AVOID RISK OF SERIOUS INJURY OR POSSIBLE VIOLATION OF LAWS, NOT FOR USE WHERE VISIBLE TO DRIVER FOR ANY PURPOSE OTHER THAN NAVIGATION OR USE WITH REAR VIEW CAMERA.

While Driving

- The driver must not operate the color LCD (liquid crystal display) monitor. Operating the color LCD monitor may lead to carelessness and cause an accident. Stop your vehicle in a safe location when operating the unit.
- The driver must not watch videos while driving. It may lead to carelessness and cause an accident.
- Keep the unit at an appropriate volume level. Driving with the sound at a level that prevents you from hearing sounds outside and around the vehicle may cause an accident.

CAUTION: Follow local rules and regulations for installing monitor.

Precautions

Volume Level

For your driving safety, keep the volume level low enough to be aware of road and traffic conditions.

Car Washing

To avoid electrical shorts which may cause fire, or other damage, do not expose this product (including the speakers and CDs) to water or excessive moisture.

Car Ventilation

If your car is parked for several hours in direct sunlight, the temperature inside the car may become very high. It is advisable to drive the car and give the interior a chance to cool down before switching the unit on.

Power Supply

This product is designed to be used in a car having a 12-Volt negative ground battery system.

Service

This product is made of precision parts. Do not attempt to disassemble or adjust any parts. For repair, please consult your nearest authorized Panasonic Service Center.

Note: The preset memory is cleared to return to the original factory setting when the power connector or battery is disconnected.

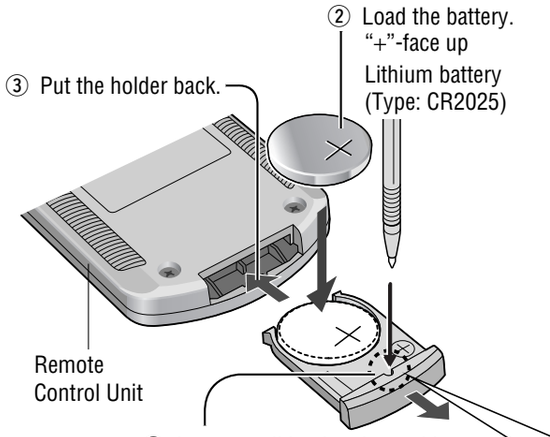
Cautions:

- This system is designed so that you cannot see the moving picture while you are driving. No picture appears while driving if an optional DVD player or other devices are connected. Park your car in a safe place and engage the side brake (parking brake) lever before watching the monitor.
- Picture might not be displayed, or it might take more time than usual to display picture in low temperature. Also, movement of picture might become labored, or picture quality might deteriorate in low temperature. (practicable temperature: 0 °C to 40 °C)
- Do not touch the LCD (liquid crystal display).
  If you touch the LCD, your fingerprints are conspicuous because the surface of the LCD was specially processed.
- In some cases, noise is generated. It depends on the position or direction of a mobile phone etc. Change the position or direction of the mobile phone etc. or keep them away from the unit.

Before Use/Preparation

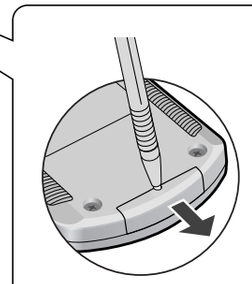
Remote Control Preparation

Battery Installation



Cautions:

- Do not use an object whose top is weak such as a mechanical pencil. Use caution not to damage it.
- Caution must be taken to avoid injury from the pointed-top object.



Insert the pointed top into the hole of the holder as shown in the figure.

Battery Notes

- Battery life: approx. 6 months
- Battery handling:
  - no disassembling (prevention of burst)
  - no short-circuiting (prevention of burst)
  - avoidance of fire (prevention of burst)
  - out of the reach of children (prevention of swallow)
- Replaced old battery:
  Follow the local regulations.

Caution: Improper use of batteries may cause overheating, an explosion or ignition, resulting in injury or a fire.

ACC Set

Check whether there is the ACC position on the ignition switch of your car.

For **ACC equipped** case:

(Default: ACC OFF)

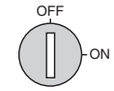
Set the ACC selection to **ON**. (➡ page 28)

ACC ON is attached to the functional descriptions under the ACC selection ON condition.

ACC ON

- Power is turned on when a magazine is inserted while power is off.
- The clock time can be displayed on the sub-LCD display while the power is off.
- When the ignition key is turned to OFF, the security message is shown and the panel removal alarm sounds (at Security Function ON setting).

For **ACC not equipped** case:



(Default: ACC OFF)

Set the ACC selection to **OFF**. (➡ page 28)

NO ACC is attached to the functional descriptions under the vehicle has no ACC condition.

ACC OFF

- When power is turned off, the security message is shown and the panel removal alarm sounds (at Security Function ON setting).

Caution: Be sure to select OFF when your car has no ACC position in the ignition switch. Failure to do this could cause the battery to go dead.

Indications on the Screen

■ AM/FM mode

Sound/Mode Display The current mode appears.
FM: Sound (Radio (AM/FM)/Changer (CH-C))

Volume Display
MUTE or LOUD lights when the MUTE or LOUD function is set to ON.

Clock Time
Default: off
(➡ page 14, 22)

Mode Display

LOCAL Indicator
LOCAL mode is set to ON. (➡ page 12)

Indications on RDS
(➡ page 14-16)

FM Stereo Indicator
(➡ page 12)

● VTR Mode

(For external video source. Optional DVD player, Camcorder or TV tuner (e.g.) should be connected.)

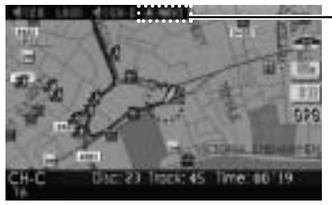
Sound and image/Mode Display The current mode appears.
VTR1: Sound and image (VTR 1/2)

Clock Time
Default: off
(➡ page 14, 22)

Mode Display

● Car Navigation Mode

(For Car Navigation system. Optional Car Navigation system should be connected.)



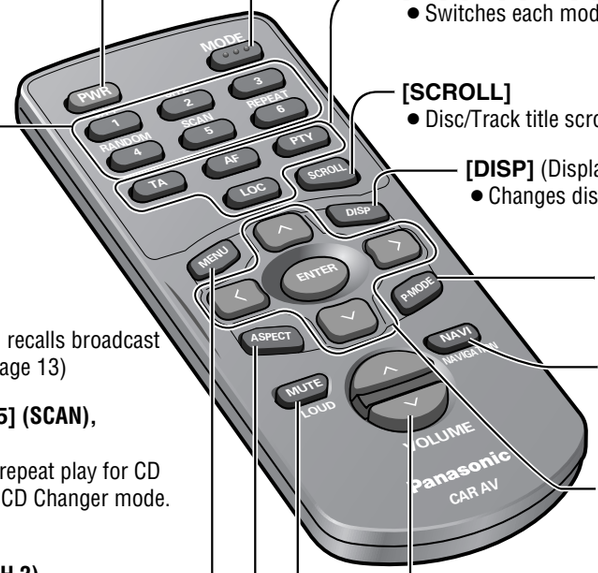
Navigation Indicator
This icon appears when the car navigation mode is set to ON.

Notes:
- Displaying contents and their positions partly vary with each mode. Refer to the description of each mode for details.
- On-Screen Display appears for 4 seconds when operation is made.
- To restore the cleared On-Screen Display, press **[ENTER]**.

Names of Controls and Functions

Remote Control

Aim the remote control at the remote control sensor of the display unit and operate it.



[MODE]
- Changes the modes. (➡ page 10, 12, 18, 20)
- Closes the menu. (➡ page 17, 22)

[PWR] (Power)
- Switches on/off the power. (➡ page 10)

[TA], [AF], [PTY], [LOC] (Local)
- Switches each mode on and off. (➡ page 12, 14)

[SCROLL]
- Disc/Track title scroll. (➡ page 21)

[DISP] (Display)
- Changes display. (➡ page 38)

[1] - [6]
- Memorizes and recalls broadcast stations. (➡ page 13)

[4] (RANDOM), [5] (SCAN), [6] (REPEAT)
- Random, scan repeat play for CD Changer/Video CD Changer mode. (➡ page 21)

[1] (CH 1), [2] (CH 2)
- Switches changer 1 and 2 when two changers are connected. (➡ page 20)

[MENU]
- Shows the menu screen. (➡ page 17, 22)

[ASPECT]
- Selects the aspect ratio. (➡ page 40)

[MUTE] (LOUD)
- Mutes the sound temporarily. (➡ page 10)
- Compensates bass and treble in the low and middle volume level. (LOUD) (➡ page 10)

[P•MODE] (Private mode)
- Activate/inactivate the private mode. (➡ page 41)

[NAVI] (NAVIGATION)
- Toggles the navigation display on and off. (➡ page 18)

[<] [>] (Track)
- Selects or searches for a track or frequency. (➡ page 12, 21)
- Selects (horizontally) or adjusts an operation or item.

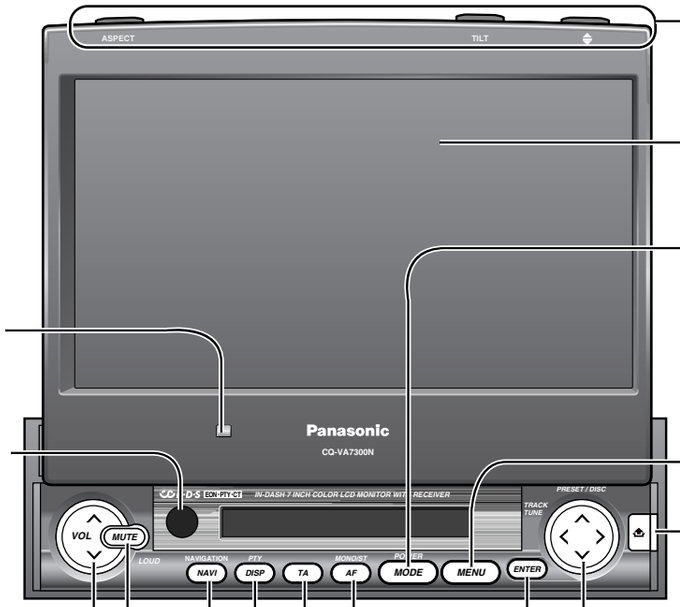
[∧] [∨] (Disc)
- Selects a disc. (➡ page 21)
- Selects (vertically) or adjusts an operation or item.

[ENTER]
- Selects a band. (➡ page 12)
- Searches for broadcast stations and memorizes them automatically. (➡ page 13)
- Determines an operation or item.

[∧] [∨] (VOLUME)
- Adjusts the volume level. (➡ page 10)

Names of Controls and Functions (continued)

Display Unit



7 inches (18 cm) Wide LCD Display

Dimmer sensor

Remote control sensor

[MODE] (POWER)
- Switches on/off the power. (➡ page 10)
- Changes the modes. (➡ page 10,12,18,20)
- Closes the menu. (➡ page 17, 22)

[MENU]
- Shows the menu screen. (➡ page 17, 22)

[⏏] (Release)
- Detaches the removable face plate.(➡ page 48)

[VOL∧] [VOL∨]
- Adjusts the volume level. (➡ page 10)

[MUTE] (LOUD)
- Mutes the sound temporarily. (➡ page 10)
- Compensates bass and treble in the low and middle volume level. (LOUD) (➡ page 10)

[∧] [∨] (PRESET/DISC)
- Selects (vertically) or adjusts an operation or item.
- Selects a disc. (➡ page 21)
- Selects a preset station. (➡ page 13)

[<] [>] (TRACK TUNE)
- Selects or searches for a track or frequency. (➡ page 12, 21)
- Selects (horizontally) or adjusts an operation or item.

[NAVI] (NAVIGATION)
- Toggles the navigation display on and off. (➡ page 18)

[DISP] (PTY)
- Changes display. (➡ page 38)
- Switches PTY mode on and off. (Press and hold) (➡ page 16)

[TA]
- Switches TA mode on and off. (➡ page 15)

[AF] (MONO/ST)
- Switches AF mode on and off. (➡ page 15)
- Switches STEREO and MONO. (Press and hold) (➡ page 12)

[ENTER]
- Selects a band. (➡ page 12)
- Searches for broadcast stations and memorizes them automatically. (➡ page 13)
- Determines an operation or item.

Note: Refer to “Names and Colors of Connectors” for names on the rear of the hide-away unit. (➡ page 52)

Display Unit (Front)

[ASP] (ASPECT)
- Selects the aspect ratio. (➡ page 40)

[TILT]
(Display unit only)
- Shows the monitor position setting menu. (➡ page 11)
- Tilts the monitor forward temporarily. (➡ page 11)

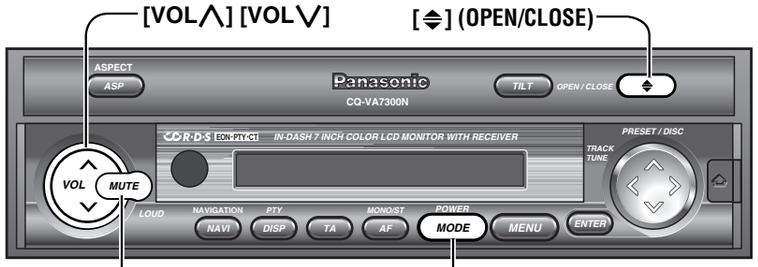
[⏏] (OPEN/CLOSE)
- Opens/closes the monitor. (➡ page 10)

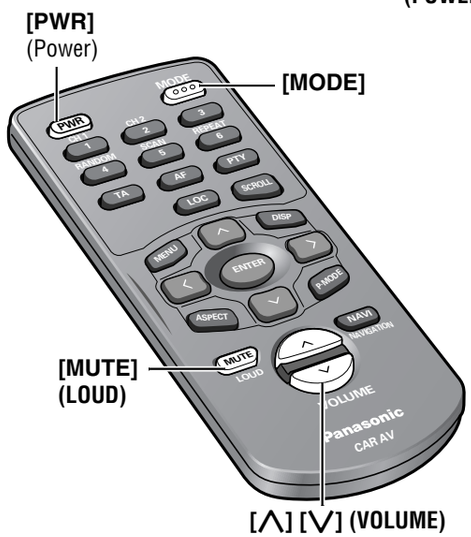
Buttons not on the Display Unit:

[1] (CH 1)
[2] (CH 2)
[3]
[4] (RANDOM)
[5] (SCAN)
[6] (REPEAT)
[SCROLL]
[P•MODE]

(➡ page 7, “Remote Control”)

General





Power

Turn your car's ignition key to ACC or ON position.
ON: Press **[MODE] (POWER)** on the display unit.
Press **[PWR]** or **[MODE]** on the remote control.
(ACC ON)

OFF: Press **[MODE] (POWER)** again for more than 2 seconds on the display unit.
Press **[PWR]** again or **[MODE]** again for more than 2 seconds on the remote control.

Mode

Press **[MODE]** to change the mode.

AM / FM (Radio) (➡ page 12)
↓
CH-C (CD Changer/ Video CD Changer Control)*1 (➡ page 20)
↓
VTR1*2 (➡ page 18)
↓
VTR2*2 (➡ page 18)

*1 Selectable only when the CD Changer or Video CD Changer is connected.
*2 VTR1/2 can be skipped when no external devices are connected. (➡ page 26)

Display Open/Close

OPEN: Press **[⏶] (OPEN/CLOSE)**.
CLOSE: Press **[⏶] (OPEN/CLOSE)** again.

Notes:
- When the display unit is opened or closed, a loud beep sounds three times.
- If the unit stops halfway, press **[⏶] (OPEN/CLOSE)** again and draw it all the way in.
- Opening/closing the display can also be done when the power is off. (ACC ON)

Warning: Do not touch the unit while the display is moving. Inserting hands, fingers or foreign objects into the unit can cause injuries and damage to the unit.

Volume

[VOL∧] : Increase
[VOL∨] : Decrease
Setting Range : 0 to 40

Note: The volume level can be set independently for each source. (For radio, one volume setting for AM, one volume setting for all FMs)

Mute

MUTE

MUTE ON: Press **[MUTE]**.
MUTE OFF: Press **[MUTE]** again.

Loudness

LOUD

When listening at low or medium volume, enhance bass and treble tones.
LOUD ON: Press and hold **[MUTE] (LOUD)** for more than 2 seconds.
LOUD OFF: Press and hold **[MUTE] (LOUD)** for more than 2 seconds again.

Note: The setup is the same way as the one from MENU. Refer to "Sound Settings" for details. (➡ page 30)

Monitor Position Adjustment

Cautions:
- For smooth adjustment, make sure to first return the lateral angle to the neutral position and then adjust the tilt angle.
- Avoid physical shock on the monitor.

Tilt Angle

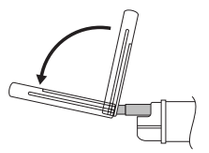
1. Press and hold **[TILT]** on the display unit for more than 1 second.
2. Press **[<]** or **[>]** to adjust.
The setup is the same way as the one from MENU. Refer to "User Settings" for details. (➡ page 22)

Notes:
- Vertical angle (TILT) data are saved in the memory, so when the display unit is drawn out next, it is automatically set at the angle adjusted before.
- After adjusting its angle, also adjust the brightness to make it easy for you to watch. (➡ page 32)
- The car model and installation condition may impose some restrictions on the adjustment of the monitor's angle.

Caution: Do not interfere with the movement of the monitor. Do not change the position of the unit forcibly.

Folding Down the Display Temporarily

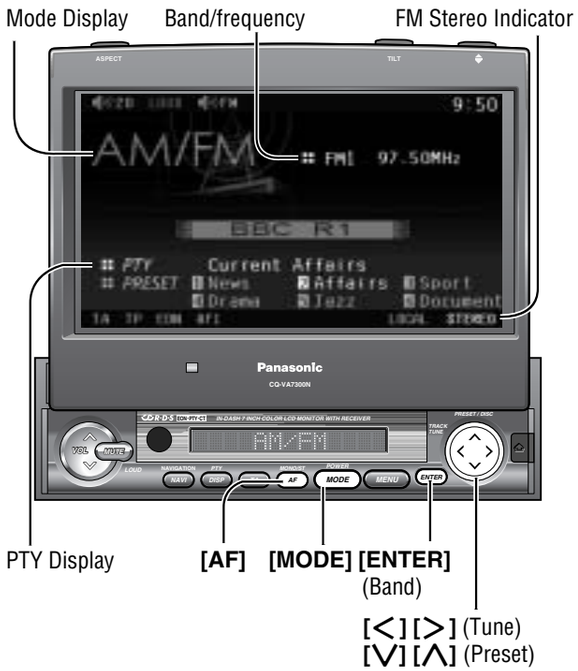
Fold Down: Press **[TILT]** on the display unit.
Raise: Press **[TILT]** again on the display unit.

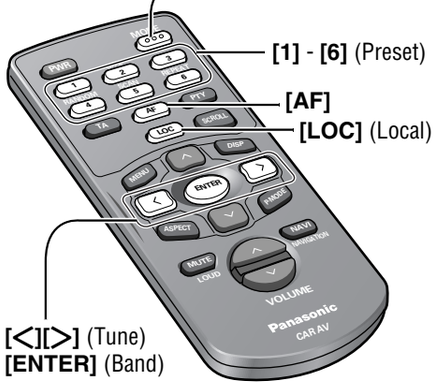


Note: Even when the unit is power off, you can fold down the display temporarily. (ACC ON)

Cautions:
- Do not place any object on the display unit, or subject it to undue force.
- Do not move the display forcibly.

Radio





Sub-LCD Display (at monitor close)

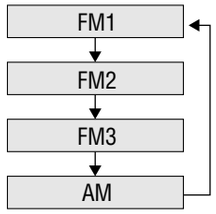
"Sub-LCD Display Change" (➡ page 38)

❶ Radio Mode

Press **[MODE]** to change to the AM/FM (LW/MW) mode.

❷ Band

Press **[ENTER]** to change the band.



Note: The stereo indicator lights during reception of an FM stereo broadcast.

❸ Manual Tuning

[>]: Higher frequency
[<]: Lower frequency

Seek Tuning

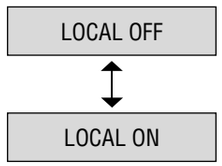
Press and hold for more than 0.5 seconds then release.
[>]: Higher frequency
[<]: Lower frequency
Tuning will automatically stop when the signals of the next broadcast station are received.

Mono/Local Selection (MONO/LOC)

MONO: Noise is significantly decreased when weak signals are received from an FM broadcast station.
LOCAL: Only strong signals of stations are searched for in seek tuning, while at the LOCAL OFF setting, relatively weak signals are also searched for.

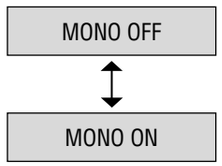
Local Mode [Default: LOCAL OFF]

Press **[LOC]** (Local) to switch the LOCAL mode on and off. (Only for remote control)



Monaural Mode [Default: MONO OFF]

Press and hold **[AF]** to switch the MONO mode on and off.



Station Preset

Perform these operations with the remote control.

Up to 6 stations each can be saved in the FM1, FM2, FM3 and AM preset station memories.

Manual Preset Memory

Manually save a station in the preset memory.

Select a band and frequency. (step ❷ and ❸ on the previous page)

Press and hold **[1]** to **[6]** for more than 2 seconds.

The frequency blinks once, and a receiving station is saved in the memory.

Auto Preset Memory

Automatically save stations with good reception in the preset memory.

Select a band. (step ❷ on the previous page)
Press and hold **[ENTER]** for more than 2 seconds.

- The 6 stations with good reception will be automatically saved in the memory under preset numbers **1** to **6**.
- Once set, the preset stations are sequentially scanned for 5 seconds each.
- To stop the scanning, press **[1]** to **[6]**.

Note: Only RDS stations will be saved at default setting (AF ON). To select non RDS stations too, set AF OFF. (➡ page 15)

Note: New stations overwrite existing saved stations after following this procedure.

Preset Station Calling

Select a band. (step ❷ on the previous page)

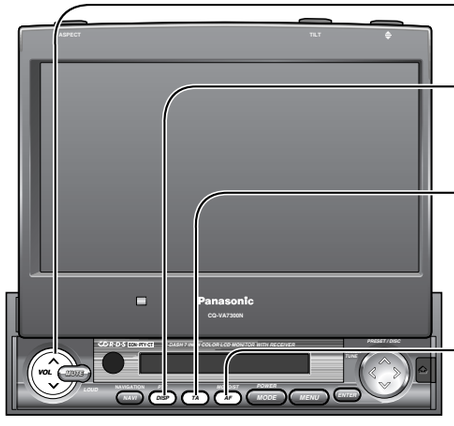
Press **[1]** to **[6]**.

Note: You can call up preset stations **1** to **6** by pressing **[∨]** and **[∧]** on the display unit as well.

Radio Data System (RDS)

RDS Basics

Some FM stations are broadcasting added data compatible with RDS. This radio set offers convenient functions using such data.
RDS service availability varies with areas. Please understand if RDS service is not available in your area, the following service is not available, either. This chapter explains the summary and operation regarding RDS.
The following functions are available when receiving RDS stations.



[VOL∧][VOL∨] : For TA Volume (only in the setting menu)
Volume level of traffic announcement can be adjusted. (➡ page 17)

[DISP](PTY) (Press and hold) : For Program Type (PTY) Display
RDS FM stations provide a program type identification signal.
Example: news, rock, classical music, etc.(➡ page 16)

[TA] : For Traffic Announcement (TA)
Radio announcements on traffic conditions.
Some RDS FM stations periodically provide traffic announcement.
The station which broadcast the traffic announcement is called Traffic Program (TP). (➡ page 15)

[AF] : For Alternative Frequency (AF)
When reception is poor, an RDS station broadcasting the same program is tuned in automatically. (➡ page 15)

Clock Time (CT) Service
When receiving an RDS station, the CT service automatically adjusts the time. (➡ page 22 for Clock Setting)

Program Service Name (PS) Display
The name of station is displayed.

Emergency Announcement Reception
When an emergency announcement is broadcast, the unit is automatically switched to receiving that broadcast. (Even when in CD Changer/Video CD Changer and VTR mode.)
During receiving the emergency announcement, “ALARM” appears on the display.

Note: Emergency announcements are broadcast at the TA volume level. (➡ page 17)

Enhanced Other Network (EON)
When EON data is received, the EON indicator lights the TA and AF functions are expanded as follows.
TA: Traffic information from the current and other network stations can be received.
AF: The frequency list of preset RDS stations is updated by EON data.
EON enables the radio to make fuller use of RDS information. It constantly updates the AF list of preset stations, including the one that is currently tuned in to. For example, if you preset a station far from home, you will later be able to receive the same station at an alternative frequency, or any other station serving the same program. EON also keeps track of locally available TP stations for quick reception.

For operations on the page 14-16, buttons on the remote control are also available.

For Program Type (PTY) Display
For Alternative Frequency (AF)
For Traffic Announcement (TA)
For TA Volume (only in the setting menu)

Traffic Announcement (TA)

TA Standby [Default: TA OFF]

Press **[TA]** to switch TA mode as follows.

TA ON — Receive traffic programs automatically.
TA OFF — TA is not active.

TA lights when TA is ON.

For volume level setting of Traffic Announcement, refer to RDS setting. (➡ page 17, 36)

Traffic Announcement (TA) mode

If the station received is not a TP (Traffic Program) station, the unit automatically searches for a TP station to tune in to it. When the TP station received begins a traffic announcement, you can hear it from the unit.

To listen to only traffic announcements
While listening to an FM station which is not currently broadcasting traffic announcement, press **[VOL∨]** to set the volume to 0. The traffic announcement will be output at the TA volume level.

Notes:
At seek tuning and auto preset memory
Only TP stations are searched for by seek tuning and auto preset memory at the TA mode.
If you search for non-TP stations by seek tuning and auto preset memory, set TA to OFF.

Other than the radio mode
When TA is set to ON, even if the unit is in other than the radio mode (CD Changer/Video CD Changer and VTR), the traffic information will be automatically announced. The unit will return to the previous mode after the traffic announcement has finished.

Even when the unit is in other than the radio mode (CD Changer, VIDEO CD Changer and VTR), you can switch TA on and off by pressing [TA].

Alternative Frequency (AF)

AF Level [Default: AF1]

Press **[AF]** to change AF mode as follows.

AF 1 — Low level AF operating sensitivity
Mainly for driving in an urban area
⇩
AF 2 — High level AF operating sensitivity
Mainly for driving in a suburban area
⇩
AF OFF — AF is not active

AF1 lights according to the level of AF.

For AF network (REGION) selection, refer to RDS setting. (➡ page 17, 36)

Manual AF tuning for preset station (PI (Program Identification) Seek)

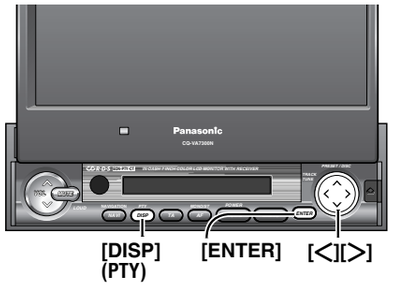
(Only for remote control)
If reception is poor when receiving a preset station but auto AF does not function, press the same preset number button. The same program with good reception will be searched for.
Press the same preset number button again to suspend the AF search.
Note: For PI Seek, cancel the TA mode first, then execute PI Seek.

Notes:
At seek tuning and auto preset memory
Only RDS stations are searched for by seek tuning and auto preset memory at the AF mode.
If you searched for non-RDS stations by seek tuning and auto preset memory, set AF to OFF.

At preset station call
AF self-tuning selects a station with good reception. (for RDS station only)

Radio Data System (RDS) (continued)

Program Type (PTY) Reception



Program Type (PTY) Mode [Default: PTY OFF]

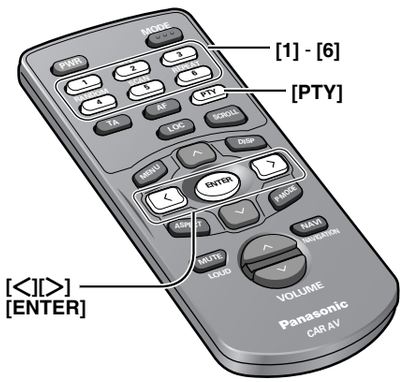
Press **[PTY]** on the remote control or press and hold **[DISP] (PTY)** on the display unit to switch the PTY mode as follows.

PTY ON — PTY display mode
The following functions are activated.

PTY OFF — PTY is not active.

Note: When PTY is activated, band switching can not be performed. If it is necessary to switch the band, inactivate PTY.

PTY Selection



① Press **[>]** to change the program type as shown below. (**[<]**: opposite direction)
② Select the desired program type and press and hold **[ENTER]** for more than 2 seconds. Seek will start to tune in to a station broadcasting the selected program type.
Press and hold **[ENTER]** again to suspend the tuning.

SPEECH →	MUSIC →	News →	Current Affairs →
Information →	Sport →	Education →	Drama →
Cultures →	Science →	Varied Speech →	Pop Music →
Rock Music →	Easy Listening →	Light Classics M →	Serious Classics →
Other Music →	Weather & Metr →	Finance →	Children's Progs →
Social Affairs →	Religion →	Phone In →	Travel & Touring →
Leisure & Hobby →	Jazz Music →	Country Music →	National Music →
Oldies Music →	Folk Music →	Documentary	

Note: When there is no corresponding program type station, "NONE" is displayed.

PTY:News
PTY display

PTY Preset Call

Program types are stored in memory under the preset buttons **[1]** to **[6]** shown in the table below.
To tune in to the desired program type, press any of the preset buttons **[1]** to **[6]**.

No.	PTY	detail
1	News	News
2	SPEECH	Current Affairs, Information, Education, Drama, Cultures, Science, Varied Speech, Weather & Metr, Finance, Children's Progs, Social Affairs, Religion, Phone In, Travel & Touring, Leisure & Hobby, Documentary
3	Sport	Sport
4	Pop M	Pop Music
5	Classics	Serious Classics
6	MUSIC	Rock Music, Easy Listening, Light Classics M, Other Music, Jazz Music, Country Music, National Music, Oldies Music, Folk Music

For language selection of PTY display, refer to RDS setting. (➡ page 17, 36)

PTY Preset Memory

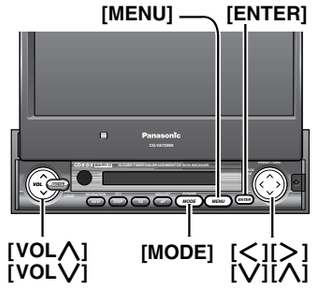
① Select a program type.
② Press and hold one of the preset buttons **[1]** to **[6]** for more than 2 seconds to store in the memory.

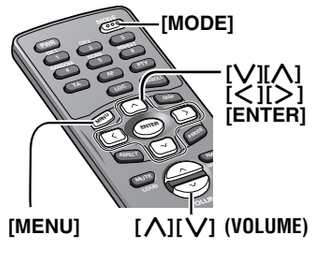
Preset PTY Search

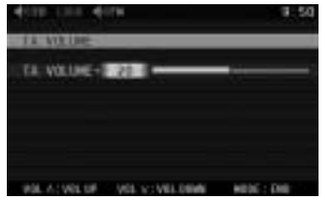
If a preset call has failed, search the program type station as follows.
① Select a desired program type by PTY preset call.
The preset program type appears on the display for 5 seconds.
② Press the same preset button again (or hold **[ENTER]** for more than 2 seconds) to tune in to the desired program type station.

Menu Setting

Preparation: Switch to the radio mode to tune in an RDS broadcast.





1 Open the RDS menu. ① Press **[MENU]**. ② Press **[<]** or **[>]** to select RDS. ③ Press **[∧]** or **[∨]** to select desired setting. ④ Press **[ENTER]** to set.	**2 Setting** **Note:** To close the menu, press **[MODE]**.
TA Volume Setting Volume level setting of traffic announcements Default: 18 Adjustment Range: 0 - 40	 Press **[VOL∧]** or **[VOL∨]** to adjust.
Region Setting AF station is tuned in from limited or unlimited regions. Default: OFF	 ① Press **[<]** or **[>]** to select ON or OFF. ② Press **[ENTER]** to set. ON : The frequency is changed only for programs **within** the region. OFF : The frequency is changed for programs **from unlimited** regions.
Program Type (PTY) Language Selection Language selection of PTY display Default: ENGLISH	 ① Press **[∧]**, **[∨]**, **[<]** or **[>]** to select the language. ② Press **[ENTER]** to set.

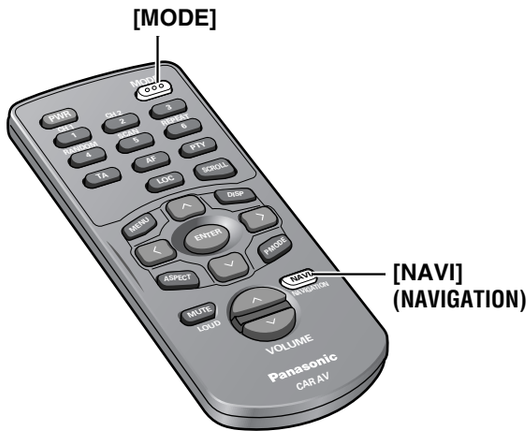
***Refer to page 36 as well.**

VTR/Car Navigation

Sub-LCD Display

VTR1 Mode display

"Sub-LCD Display Change" (➡ page 38)

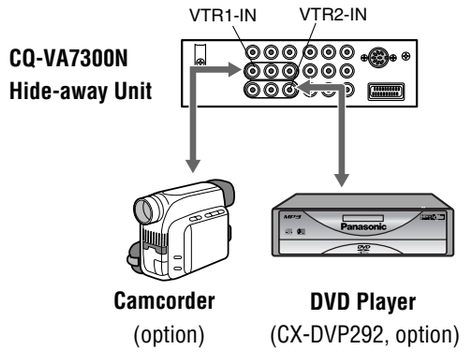


You can view the images and listen to the sounds from the connected external devices in the VTR1 mode and VTR2 mode respectively.

Example:

VTR1 : Camcorder

VTR2 : DVD Player



Camcorder (option)

DVD Player (CX-DVP292, option)

VTR1/VTR2 Mode

Press **[MODE]** to change to VTR1 or VTR2 mode.

Car Navigation Mode

Preparation: Specify the correct terminal that is connected to the car navigation system in the "INPUT/OUTPUT" operation on the "User Settings". (➡ page 24)

Press **[NAVI](NAVIGATION)** to change to the car navigation mode.
Press **[NAVI](NAVIGATION)** again to cancel.

This function allows a parallel operation. While you follow the Navigation Screen, you can listen to radio, CD Changer, Video CD Changer and VTR1/VTR2 mode in background.

Notes:

- If the navigation mode is ON, only the audio signal is switched while the video signal remains as it is.
- The mode can be changed even when the display unit is in the retracted position.
- The volume of the voice guidance from the car navigation system can be set. (➡ page 24)

Connecting with Panasonic Car Navigation System (e.g. CN-DV2000EN, CN-DV2300N, option)

Connect a **Panasonic car navigation system** to **RGB** connector. (➡ page 58, 60-61)

External Devices Connectable to VTR1/VTR2

Refer to "Electrical Connections" for each external device connection. (➡ page 50-63)

VCR/Camcorder	Select the same mode (VTR1 or VTR2) as the terminal that is connected to a VCR or Camcorder (VTR1-IN or VTR2-IN).
Car Navigation (Connection with NON-Panasonic Car Navigation System)	Select the same mode (VTR1 or VTR2) as the terminal that is connected to a car navigation system (VTR1-IN or VTR2-IN). **Note:** VTR1 and VTR2 terminals are not used for the Panasonic car navigation system (e.g. CN-DV2000EN/CN-DV2300N, option).
TV Tuner	Select the same mode (VTR1 or VTR2) as the terminal that is connected to a TV tuner (CY-TN1500PEN, option) (VTR1-IN or VTR2-IN).

Note: Select the same mode as the terminal that is connected to the device.

CD Changer/Video CD Changer Control

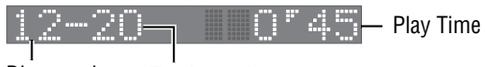
CD Changer functions are designed for an **optional Panasonic CD Changer** unit. Connect another CD Changer by using an optional dual CD Changer selector (CA-CD55EN).

Preparation: Connect the CD Changer, and load a magazine and CD.

Notes:

- CD text is displayed when the unit is connected to a CD Changer capable of recognizing CD text (CX-DP9061EN).
- Not compatible with CD-RW (except when CX-DP880N is connected). Trouble may occur while playing CD-Rs/CD-RWs.
- The power will be turned on automatically when a magazine is loaded. (ACC ON)

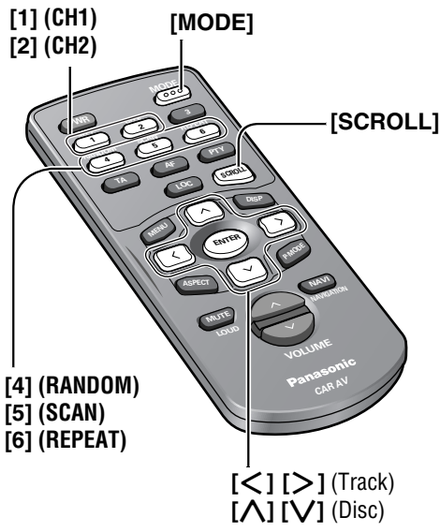
Sub-LCD Display (at monitor close)



"Sub-LCD Display Change" (➡ page 38)

CD Changer/ Video CD Changer Mode

Press **[MODE]** to change to CD Changer/Video CD Changer mode and playback starts.



System Expansion

The use of Twin CD Changer Control Unit CA-CD55EN (option) allows you to make the following connections. (➡ page 57)

- **Dual CD Changers connection**
  Dual CD Changers can be connected to the terminals of CA-CD55EN respectively.
- **CD Changer and Video CD Changer Connection**
  A changer is connected to one terminal of CA-CD55EN, and a Video CD Changers connected to the other terminal of it.

  Changers are arranged as follows:
  Press **[1]:** CH 1
  Press **[2]:** CH 2

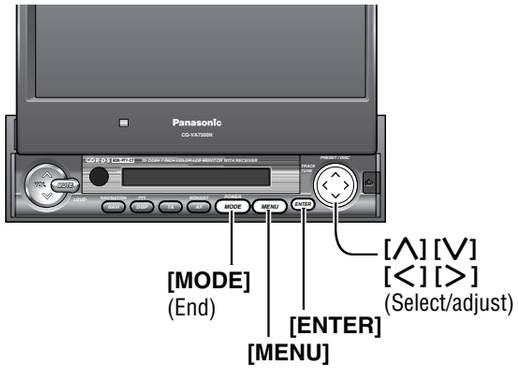
Basic Operation

Disc Selection	**[∧]**: Next disc **[∨]**: Previous disc
Track Selection	**[>]**: Next track **[<]**: Beginning of the current track Previous track (Press twice.)
Fast Forward/ Fast Reverse	Press and hold **[>]: Fast forward** **[<]: Fast reverse** Release to resume playback.
Title Scroll **(only for remote control)**	Press **[SCROLL]**. The disc/track title stops after scrolling a round.

Playing Variation

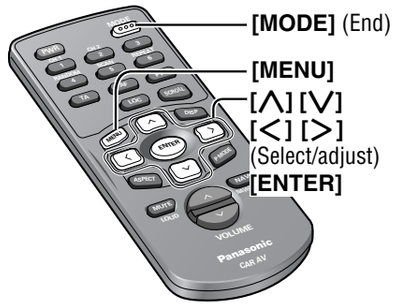
Random Play	**All Tracks**	Press **[4] (RANDOM)**. Press **[4] (RANDOM)** again to cancel.
	All Tracks on the Current Disc	Press and hold **[4] (RANDOM)** for more than 2 seconds. Press and hold **[4] (RANDOM)** again to cancel.
Scan Play The first 10 seconds of each track will be played.	**All Tracks**	Press **[5] (SCAN)**. Press **[5] (SCAN)** again to cancel.
	1st Track on Each Disc	Press and hold **[5] (SCAN)** for more than 2 seconds. Press and hold **[5] (SCAN)** again to cancel.
Repeat Play	**Current Track**	Press **[6] (REPEAT)**. Press **[6] (REPEAT)** again to cancel.
	Current Disc	Press and hold **[6] (REPEAT)** for more than 2 seconds. Press and hold **[6] (REPEAT)** again to cancel.

User Settings



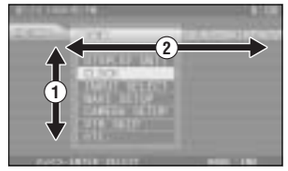
1 Menu

2 Submenu



3 Setting

***Making selection and adjustment on the Menu.**



① **[Λ]** and **[V]** buttons move the cursor vertically.
② **[>]** and **[<]** buttons move the cursor horizontally.
③ To set, press **[ENTER]**.

- Press **[MODE]** (End) to close the main menu and the setting/adjusting menu.
- Press **[MENU]** in the setting/adjusting menu to return to the main menu mode.

Display Unit

TILT (Tilting angle adjustment)
Default: 5
Setting range: 1 to 5

OPEN/CLOSE
Automatic monitor OPEN/CLOSE in accordance with ACC ignition switch ON/OFF
Default: MANUAL

① Press **[MENU]** to display the menu.
② Press **[>]** or **[<]** to select “USER”.

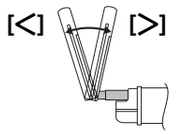
USER
↕
SOUND
↕
SCREEN
↕
RDS

① Press **[Λ]** or **[V]** to select “DISPLAY UNIT”.
② Press **[ENTER]** to set.

DISPLAY UNIT

*Make a selection.

TILT **Tilting angle adjustment**



Press **[<]** or **[>]** to select the setting.

1 2 3 4 5

OPEN/CLOSE **Monitor setup**

MANUAL : no interlock between monitor OPEN/CLOSE and ACC ON/OFF

AUTO : interlock between monitor OPEN/CLOSE and ACC ON/OFF (ACC ON)

Notes:
- For smooth adjustment, make sure to first return the lateral angle to the neutral position and then adjust the tilt angle.
- The monitor position setting menu can also be displayed by pressing the **[TILT]** button on the display unit for more than 1 second. (➡ page 11)

Clock Setting

Default: DISPLAY...OFF
CLOCK MODE...RDS
ADJUST...0/H, 00/M

Notes:
- The clock starts after the unit returns to the regular mode by pressing **[MODE]**.
- The 24-hour clock system is adopted.

Note: The menu RDS can not be selected in the modes other than FM mode.

① Press **[Λ]** or **[V]** to select “CLOCK”.
② Press **[ENTER]** to set.

CLOCK

*Make selection and adjustment.

DISPLAY **Clock display for the monitor**

ON : clock display ON ([0:00] is displayed before adjusting the clock.)

OFF : clock display OFF

CLOCK MODE **Clock preference**

RDS : The clock is automatically adjusted using the RDS clock time service function. (➡ page 14)

MANUAL : Manually adjusted time is displayed.

ADJUST **Adjusting the clock manually**

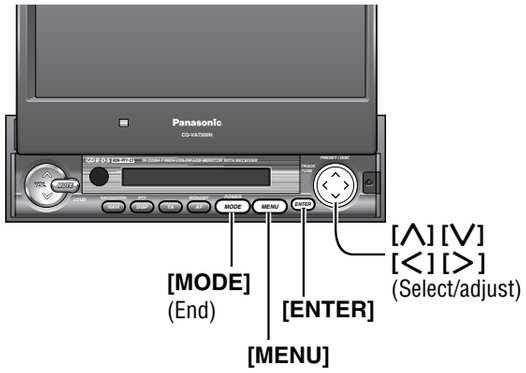
0/H : Press **[<]** to adjust the hour.

00/M : Press **[>]** to adjust the minute.

Notes:
- To change numbers rapidly while adjusting cock, hold **[<]** or **[>]**.
- The clock starts by pressing **[MODE]** or **[MENU]** after clock adjustment.

User Settings (continued)

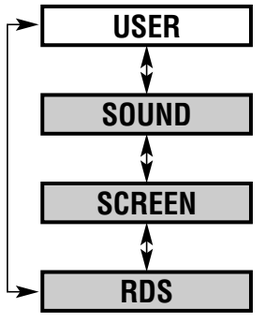
Note: The submenu, "NAVI SETUP", is available only when "NAVI INPUT" is set to "RGB" in "INPUT/OUTPUT".



1 Menu

① Press **[MENU]** to display the menu.

② Press **[>]** or **[<]** to select "USER".



Note: The menu RDS can not be selected in the modes other than FM mode.

2 Submenu

① Press **[∧]** or **[∨]** to select "INPUT/OUTPUT".

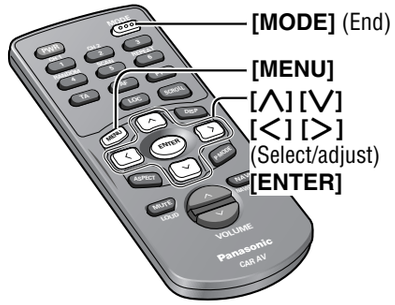
② Press **[ENTER]** to set.

INPUT/OUTPUT

① Press **[∧]** or **[∨]** to select "NAVI SETUP".

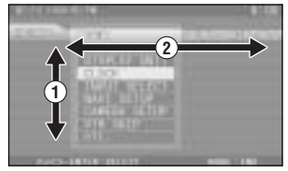
② Press **[ENTER]** to set.

NAVI SETUP



3 Setting

*Making selection and adjustment on the Menu.



① **[∧]** and **[∨]** buttons move the cursor vertically.

② **[>]** and **[<]** buttons move the cursor horizontally.

③ To set, press **[ENTER]**.

- Press **[MODE]** (End) to close the main menu and the setting/adjusting menu.
- Press **[MENU]** in the setting/adjusting menu to return to the main menu mode.

Input/output

NAVI INPUT
Default: RGB

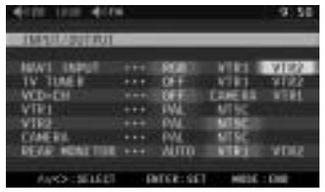
TV TUNER
Default: OFF

VCD-CH (VIDEO CD CHANGER)
Default: OFF

VTR 1/ 2
Default: PAL

CAMERA
Default: PAL

REAR MONITOR
Default: AUTO



*Make a selection.

NAVI INPUT : set the terminal to which a Panasonic car navigation system (CN-DV2300N/CN-DV2000EN, option) is connected. (It is recommended that a car navigation system be connected to the RGB terminal.) If no car navigation system is connected, select RGB.

TV TUNER : set the terminal to which a TV tuner (CY-TN1500PEN, option) is connected. If no TV tuner is connected, select OFF.

VCD-CH : set the terminal to which a Video CD (VCD) Changer is connected. If no changer is connected, select OFF.

VTR 1 / **VTR 2** : select PAL or NTSC in accordance with equipment connected to the VTR 1 and VTR 2 terminals.

CAMERA : select PAL or NTSC in accordance with equipment connected to the CAMERA IN terminals.

Note: Select PAL or NTSC in accordance with equipment to be connected. Failure to observe this results in distorted picture.

REAR MONITOR : set image and audio to be output on the rear monitor.

Note: The sound and images of TV tuner and Video CD Changer are not output on the rear monitor.

Navigation Set Up

NAVI SP (Speaker selection for Navigation)
You can choose which speaker is used for voice guidance of the car navigation system.

Default: BOTH

NAVI MUTE (Navigation mute level)
Select the mute level of this unit during the voice guidance from the Panasonic car navigation system.
Preparation: Connect the navi mute lead.

Default: –10

NAVI VOL (Navigation volume)
Volume adjustment of the car navigation system is executed.

Default: 30

*Make selection and adjustment.

NAVI SP — **Speaker selection for Navigation**

BOTH : NAVI voice output from both front L ch. and front R ch.

Lch : NAVI voice output from front L ch.

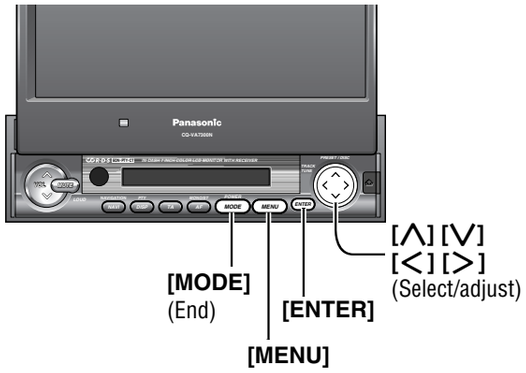
Rch : NAVI voice output from front R ch.

NAVI MUTE — **Navigation mute level**

0 : unchanged
–10 : decrease 10 dB
–20 : decrease 20 dB
– ∞ : no sound

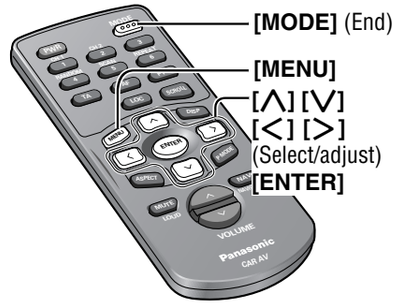
NAVI VOL — **Navigation volume**

User Settings (continued)



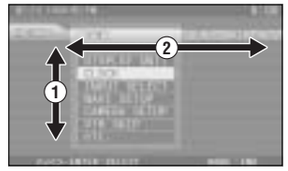
1 Menu

2 Submenu



3 Setting

***Making selection and adjustment on the Menu.**



① **[Λ]** and **[V]** buttons move the cursor vertically.
② **[>]** and **[<]** buttons move the cursor horizontally.
③ To set, press **[ENTER]**.

- Press **[MODE]** (End) to close the main menu and the setting/adjusting menu.
- Press **[MENU]** in the setting/adjusting menu to return to the main menu mode.

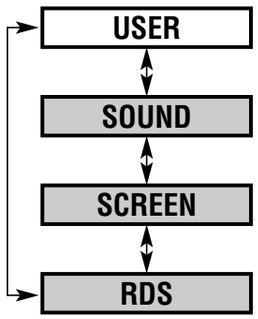
Rear View Camera Set up

CAMERA (Rear view camera input)
Selection of the terminal that connects to the rear view camera allows you to view images through the rear view camera automatically when you put the shift lever into the reverse position.
Preparation: Connect the reverse lead. (➡ page 55)
Default: OFF

SCALE (Rear view camera scale display)
Images through the rear view camera can be shown in the scale display mode.
Default: OFF

SCALE ADJUST (Scale adjustment)
Setting range: 3 steps

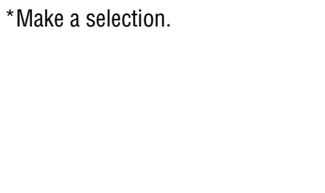
① Press **[MENU]** to display the menu.
② Press **[>]** or **[<]** to select “USER”.



Note: The menu RDS can not be selected in the modes other than FM mode.

① Press **[Λ]** or **[V]** to select “CAMERA SETUP”.
② Press **[ENTER]** to set.

CAMERA SETUP



*Make a selection.

CAMERA **Rear view camera input**

ON	: connected
OFF	: unconnected

Note: Make sure to select “OFF” when no rear view camera is connected.

Display for the scale adjustment.

SCALE **Rear view camera scale display**

ON	: scale display on
OFF	: scale display off

SCALE ADJUST **Scale adjustment**

Press **[>]** or **[<]** to adjust.

VTR skip

If a VTR is not used, the VTR mode is skipped when changing the mode.

Default: OFF

① Press **[Λ]** or **[V]** to select “VTR SKIP”.
② Press **[ENTER]** to set.

VTR SKIP

*Make a selection.

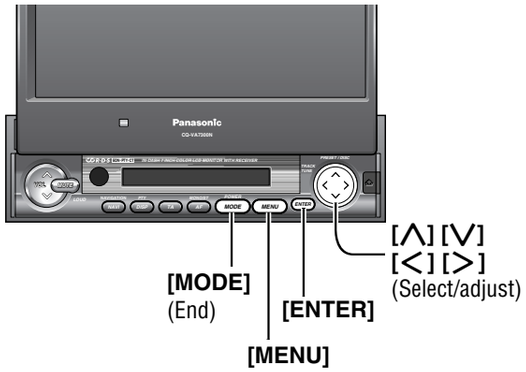
VTR1 SKIP **VTR skip**

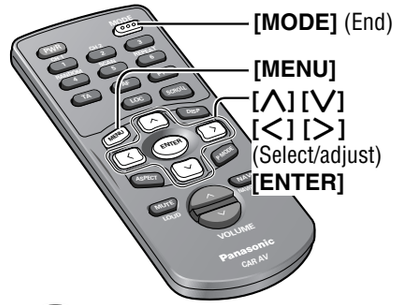
ON	: skip VTR1
OFF	: not skip VTR1

VTR2 SKIP **VTR skip**

ON	: skip VTR2
OFF	: not skip VTR2

User Settings (continued)



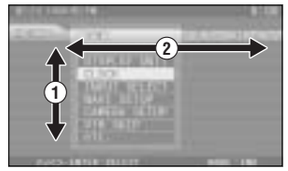


1 Menu

2 Submenu

3 Setting

***Making selection and adjustment on the Menu.**



① **[Λ]** and **[V]** buttons move the cursor vertically.

② **[>]** and **[<]** buttons move the cursor horizontally.

③ To set, press **[ENTER]**.

- Press **[MODE]** (End) to close the main menu and the setting/adjusting menu.
- Press **[MENU]** in the setting/adjusting menu to return to the main menu mode.

Useful Functions

BEEP

Note: You cannot mute a beep and a security alarm that are generated when opening or closing the display.

Default: ON

ACC SEL

Default: OFF

Caution: Be sure to select OFF when your car has no ACC position in the ignition switch. Failure to do this could cause the battery to go dead.

SECURITY LED

Allows you to activate the anti-theft function when leaving your car.

Default: ON

VIDEO-CNT (VIDEO CONTROL)

This “Video Control Setting” is required when you connect a Panasonic car navigation system with a built-in DVD player.

Default: VTR 1

MEMORY CLEAR

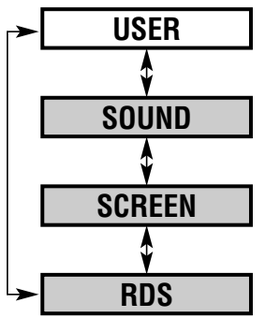
This product retains setting information even if the battery is disconnected. However, “MEMORY CLEAR” allows all setting information to be reset to default settings.

Default: NO

Caution: Be aware that this function restores the unit to default settings, so that all the memories and settings that you have set will be lost.

① Press **[MENU]** to display the menu.

② Press **[>]** or **[<]** to select “USER”.



Note: The menu RDS can not be selected in the modes other than FM mode.

① Press **[Λ]** or **[V]** to select “etc”.

② Press **[ENTER]** to set.

etc

*Make a selection.

BEEP **Button operation sound**

ON	: operation sound (Beep) ON
OFF	: operation sound (Beep) OFF

ACC SEL **Setting ACC selection ON and OFF**

ON	: set to ON if your car has ACC position.
OFF	: set to OFF if your car has no ACC position.

SECURITY LED **Setting security indicator ON and OFF**

ON	: security indicator on after front panel removal
OFF	: security indicator off after front panel removal

The security system operates as follows under conditions as described below.

NO ACC : when the power of this unit is turned OFF...

ACC ON : when the key in the ignition is turned OFF...

- Security message will be displayed and the panel removal alarm will be active. (➡ page 49)
- When the front panel is removed, the security indicator blinks. (➡ page 49)

VIDEO-CNT **Video control setting**

VTR1	: connected to the VTR1-IN
VTR2	: connected to the VTR2-IN

Notes:

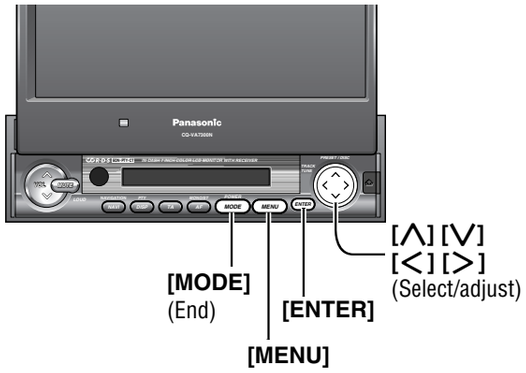
- Select a terminal connected to the DVD output terminal of a Panasonic car navigation system with a built-in DVD player through an RCA cord.
- When you connect a Panasonic car navigation system with a built-in DVD player, connect a video control lead as well. (➡ page 60-61)

MEMORY CLEAR **Clearance of memory**

NO	: no memory clear. The display returns to the menu.
YES	: default settings

Sound Settings

Note: The submenu, "BAL/FAD" is not available when "P • MODE" is active.



1 Menu

① Press **[MENU]** to display the menu.

② Press **[>]** or **[<]** to select "SOUND".

USER
↕
SOUND
↕
SCREEN
↕
RDS

Note: The menu RDS can not be selected in the modes other than FM mode.

2 Submenu

Bass/Treble

Default: ±0 dB
Setting range: –12 dB to +12 dB (2 dB steps)

Press **[∧]** or **[∨]** to select "TONE".

TONE

Balance/Fader

Default: Center
Setting range: 15 levels for each

Press **[∧]** or **[∨]** to select "BAL/FAD".

BAL/FAD

Loudness

Default: ON

Press **[∧]** or **[∨]** to select "LOUD".

LOUD

Subwoofer Control

LEVEL (Subwoofer Volume Level)

Default: 4
Setting range: 0 to 7

LPF (Subwoofer Low Pass Filter (Cut off frequency))

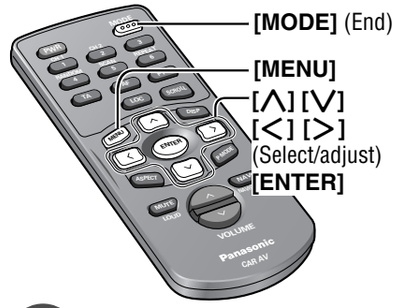
Select the upper limit frequency of the sound from Subwoofer.

Default: 120 Hz

① Press **[∧]** or **[∨]** to select "SUB-WOOFER".

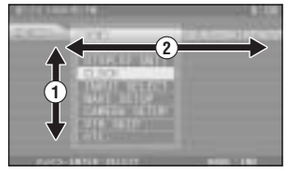
② Press **[ENTER]** to set.

SUB-WOOFER



3 Setting

***Making selection and adjustment on the Menu.**



① **[∧]** and **[∨]** buttons move the cursor vertically.

② **[>]** and **[<]** buttons move the cursor horizontally.

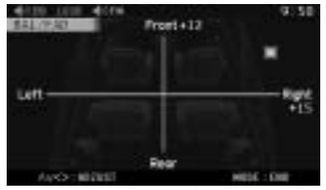
③ To set, press **[ENTER]**.

- Press **[MODE]** (End) to close the main menu and the setting/adjusting menu.
- Press **[MENU]** in the setting/adjusting menu to return to the main menu mode.

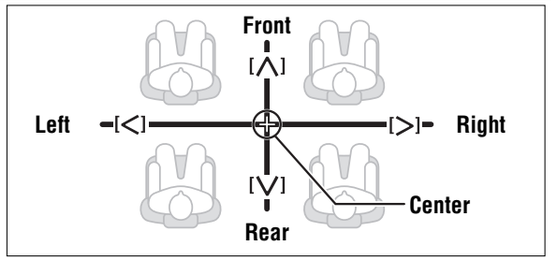
*Make selection and adjustment.

BASS **Bass adjustment**

TREBLE **Treble adjustment**



*Make an adjustment.



*Make a selection.

ON : enhance bass and treble tones at low or medium volume

OFF : OFF

Note: The loudness setting can be also switched between ON and OFF by pressing and holding **[MUTE](LOUD)** on the main unit for more than 2 seconds.

*Make selection and adjustment.

LEVEL **Subwoofer volume level**

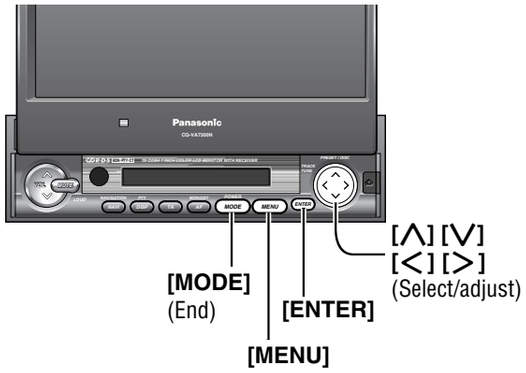
Note: No sound comes out from Subwoofer when set to level 0.

LPF **Subwoofer low pass filter (Cut off frequency)**

120 Hz : 120 Hz

80 Hz : 80 Hz

Display (Screen) Settings



1 Menu

① Press **[MENU]** to display the menu.
② Press **[>]** or **[<]** to select “SCREEN”.

USER
SOUND
SCREEN
RDS

Note: The menu RDS can not be selected in the modes other than FM mode.

2 Submenu

Display Dimmer

Adjustment of monitor backlight

Default: AUTO
Setting range: AUTO, 1 to 4

① Press **[Λ]** or **[V]** to select “DIMMER”.
② Press **[ENTER]** to set.

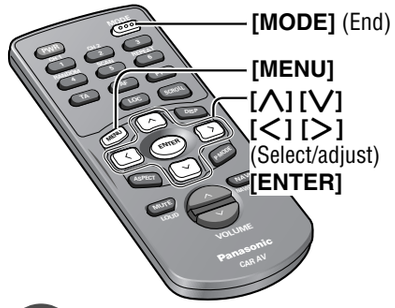
DIMMER

Display Adjustment

Default: ±0
Setting range: –15 to +15

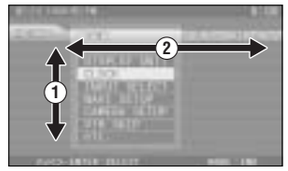
① Press **[Λ]** or **[V]** to select “PICTURE”.
② Press **[ENTER]** to set.

PICTURE



3 Setting

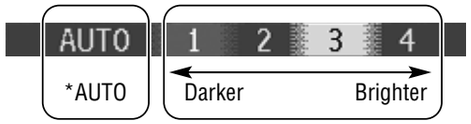
***Making selection and adjustment on the Menu.**



① **[Λ]** and **[V]** buttons move the cursor vertically.
② **[>]** and **[<]** buttons move the cursor horizontally.
③ To set, press **[ENTER]**.

- Press **[MODE]** (End) to close the main menu and the setting/adjusting menu.
- Press **[MENU]** in the setting/adjusting menu to return to the main menu mode.

*Make an adjustment.



*AUTO: automatically adjusted according to ambient light intensity.

*Make selection and adjustment.

CONTRAST **Adjust the image contrast**

Decrease the contrast between black and white — Increase the contrast between black and white

BRIGHT **Adjust the image brightness**

Darker — Brighter

COLOR **Adjust the image color depth**

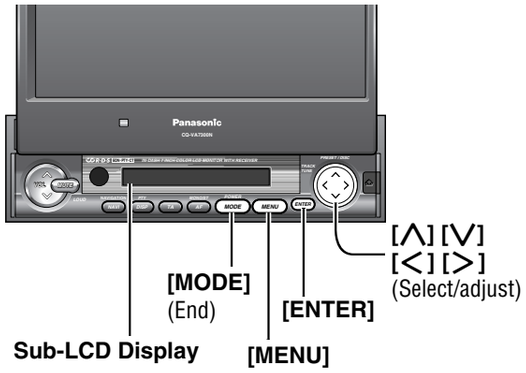
Lighten the depth of color on the display — Deepen the depth of color on the display

TINT **Adjust the image tone or tint**

Emphasize red in the color image — Emphasize green in the color image

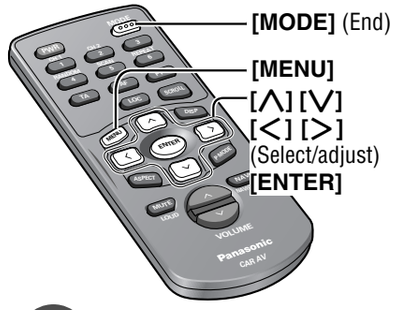
Note: TINT adjustment is not available when using the PAL system.

Display (Screen) Settings (continued)



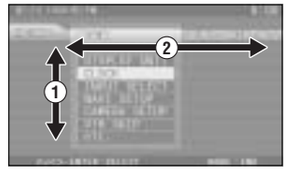
1 Menu

2 Submenu



3 Setting

***Making selection and adjustment on the Menu.**



① **[∧]** and **[∨]** buttons move the cursor vertically.

② **[>]** and **[<]** buttons move the cursor horizontally.

③ To set, press **[ENTER]**.

- Press **[MODE]** (End) to close the main menu and the setting/adjusting menu.
- Press **[MENU]** in the setting/adjusting menu to return to the main menu mode.

Sub-LCD Dimmer

Adjustment of sub-LCD display backlight

Default: HIGH

① Press **[MENU]** to display the menu.

② Press **[>]** or **[<]** to select “SCREEN”.

① Press **[∧]** or **[∨]** to select “LCD DIMMER”.

② Press **[ENTER]** to set.

LCD DIMMER

*Make a selection.

LCD DIMMER **LCD Dimmer**

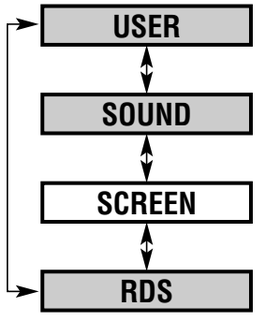
HIGH : Brighter

LOW : Darker

Sub-LCD Contrast

Adjusting the contrast between black and white.

Default: 4
Adjustment range: 1 to 5



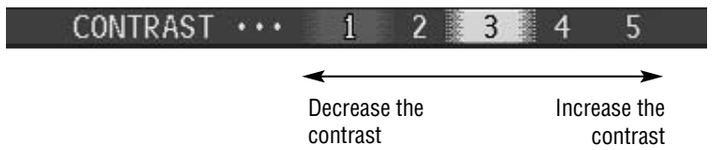
Note: The menu RDS can not be selected in the modes other than FM mode.

① Press **[∧]** or **[∨]** to select “LCD CONTRAST”.

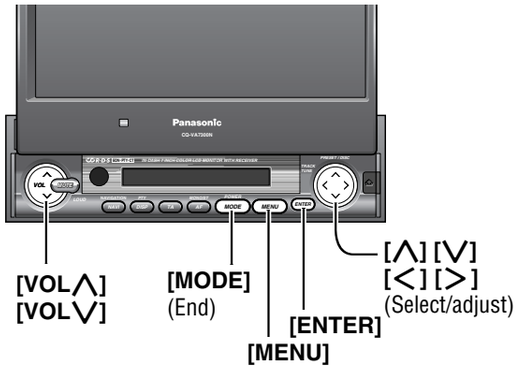
② Press **[ENTER]** to set.

LCD CONTRAST

*Make an adjustment.



RDS Settings



1 Menu

① Press **[MENU]** to display the menu.

② Press **[>]** or **[<]** to select “RDS”.

USER
↕
SOUND
↕
SCREEN
↕
RDS

Note: The menu RDS can not be selected in the modes other than FM mode.

2 Submenu

TA Volume Setting

Volume level setting of traffic announcements

Default: 18
Adjustment Range: 0 - 40

① Press **[∧]** or **[∨]** to select “TA VOLUME”.

② Press **[ENTER]** to set.

TA VOLUME

Region Setting

AF station is tuned in from limited or unlimited regions.

Default: OFF

① Press **[∧]** or **[∨]** to select “REGION”.

② Press **[ENTER]** to set.

REGION

Program Type (PTY) Language Selection

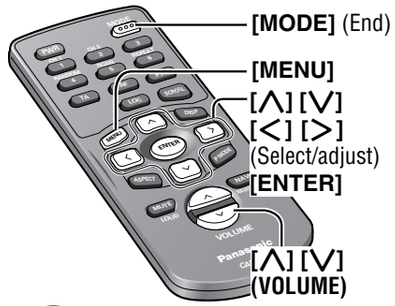
Language selection of PTY display

Default: ENGLISH

① Press **[∧]** or **[∨]** to select “PTY LANGUAGE”.

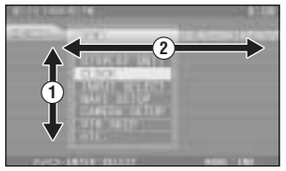
② Press **[ENTER]** to set.

PTY LANGUAGE



3 Setting

***Making selection and adjustment on the Menu.**



① **[∧]** and **[∨]** buttons move the cursor vertically.

② **[>]** and **[<]** buttons move the cursor horizontally.

③ To set, press **[ENTER]**.

- Press **[MODE]** (End) to close the main menu and the setting/adjusting menu.
- Press **[MENU]** in the setting/adjusting menu to return to the main menu mode.

Make an adjustment pressing **[VOL∧]** or **[VOL∨]**.

Decrease the volume — Increase the volume

*Make a selection.

ON	: The frequency is changed only for programs **within** the region.
OFF	: The frequency is changed also for programs **outside** the region.

*Make a selection.

ENGLISH	: English
DEUTSCH	: German
NEDERLANDS	: Dutch
ESPAÑOL	: Spanish
FRANÇAIS	: French
SVENSKA	: Swedish
ITALIANO	: Italian

Other Settings

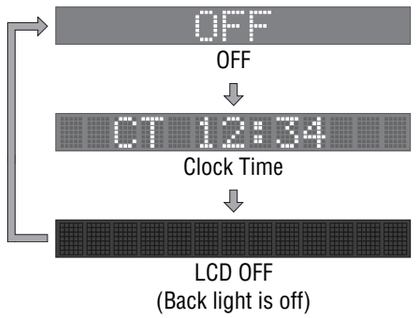
Sub-LCD Display Change

The contents on the sub-LCD display are changeable.

Press **[DISP]** to change the display as follows.

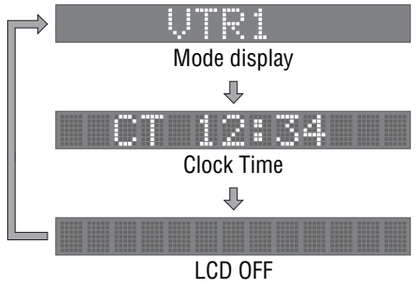
■ Power OFF (ACC ON)

At monitor either open or close…



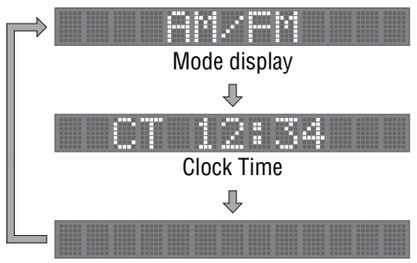
■ VTR 1/2

At monitor either open or close…



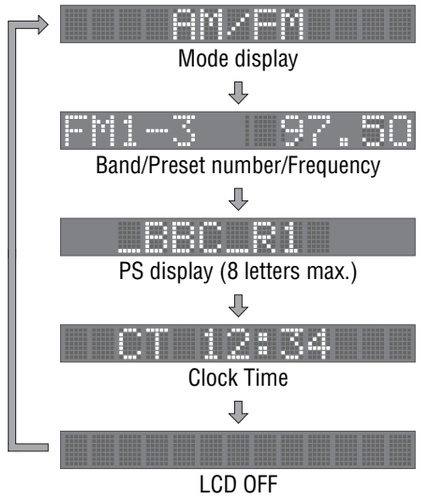
■ Radio Mode

AM/FM- At monitor open…

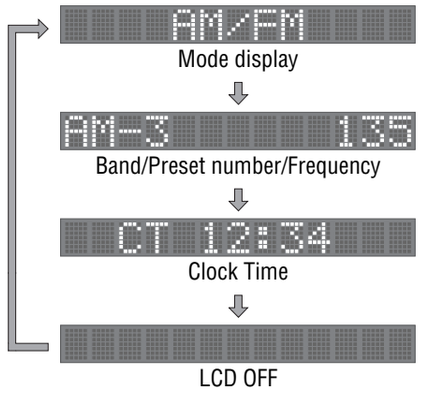


■ Radio Mode (Continued)

FM- At monitor close…

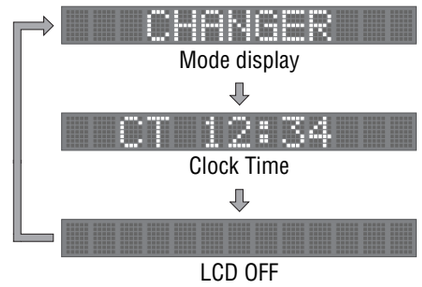


AM- At monitor close…

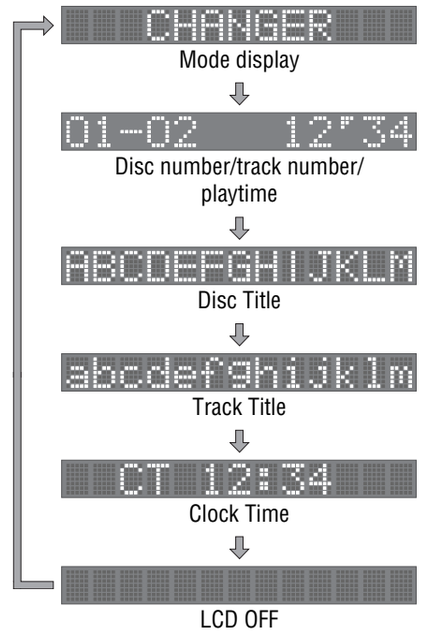


■ CD Changer/Video CD Changer Mode

At monitor open…



At monitor close…



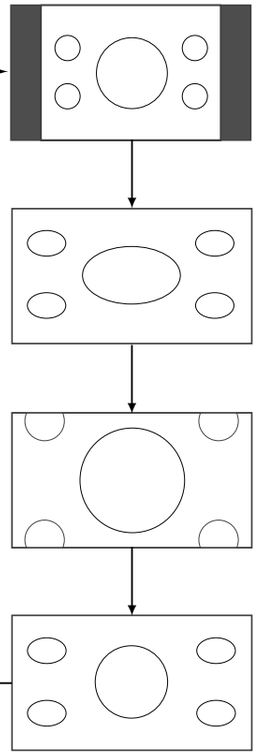
Other Settings (continued)

Aspect Ratio (For VTR mode)

Default: NORMAL
Mode: 4 types

Press **[ASP] (ASPECT)** on the display unit or press **[ASPECT]** on the remote control to change the aspect ratio as follows.

[ASP] (ASPECT)



NORMAL
- The conventional display image has a 4 to 3 ratio of horizontal to vertical.
- In this case, a blank area remains on the right and left sides of the display.

FULL
- The screen is extended horizontally as a whole to the aspect ratio of 16 to 9.
- The extension ratio is the same at any point of the screen.

ZOOM
- The screen is fully extended at the normal aspect ratio of 4 to 3.
- The top and bottom of the screen are slightly cut.

JUST
- The screen is extended horizontally to the aspect ratio of 16 to 9.
- The extension ratio increases toward the right and left ends of the screen.

Notes:
- This adjustment is valid only for Video CD Changer and VTR1/VTR2 mode.
- You can not change the aspect in the menu screen and a screen in the AM/FM and CD Changer mode. These are fixed to “FULL” as well as a Navigation image.
- When the rear view camera is in operation with the transmission gear shift in the reverse position, the image is shown on the “FULL” screen only.
- In some cases, the picture looks different from the original one due to your selection of aspect.

Cautions:
- This is to remind you that compression or extension of the screen using the aspect ratio (screen mode) changing function of this product for commercial purpose of profit making or viewing/listening by the public could infringe on the rights of the author protected by the copyright law.
- If you expand normal picture (4 to 3) by using “JUST”, “ZOOM” or “FULL” aspect to the full of the screen, you might not see the periphery of the picture, or you might see a distorted picture. Therefore, use the “NORMAL” mode to see the original picture as the author intended it.

Private Mode

You can mute the sounds from the rear speakers if necessary. Activation of the private mode allows you to enjoy the front monitor and rear monitor (e.g. CY-VM1500EX) independently with different sources at the same time.

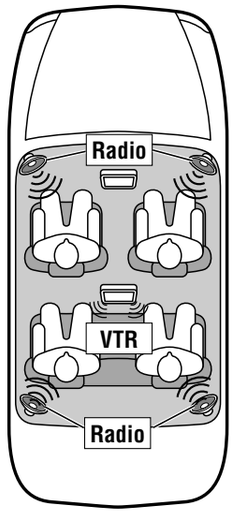
Default: OFF

Press and hold **[P•MODE]** on the remote control for more than 2 seconds to activate the private mode function or inactivate it in turn.

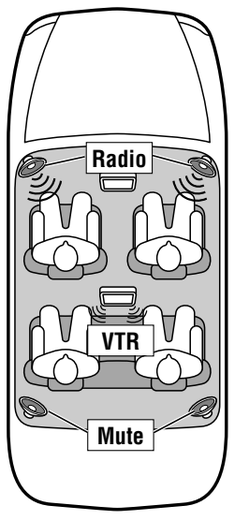
“P • MODE” indicator lights when the Private Mode is activated.

Note: Be sure to set to OFF when you do not use the private mode.

Private Mode OFF



Private Mode ON



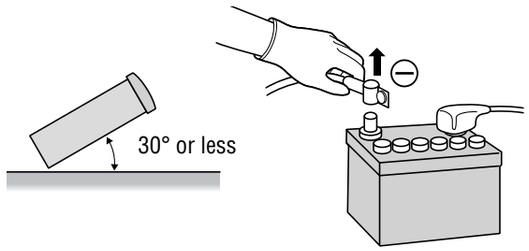
Note: The operation to change a source displayed on the rear monitor should be started from “INPUT/OUTPUT” in the menu, “USER”. (➡ page 24)

Installation

Preparation

Cautions:
- **Please follow the laws and regulations of your province or country for installation of the unit.**
- **When bending the mounting tab of the mounting collar with a screwdriver, be careful not to injure your hands and fingers.**
- **We strongly recommend you to wear gloves for installation work to protect yourself from injuries.**

- Before installation, check the radio operation with antenna and speakers.
- Disconnect the cable from the negative (–) battery terminal (see caution below).
- The unit should be installed in a horizontal position with the front end up at a convenient angle, but not more than 30°.

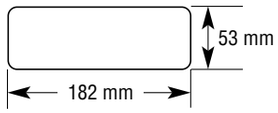


Caution: Do not disconnect the battery terminals of a car with trip or navigational computer since all user settings stored in memory will be lost. Instead take extra care with installing the unit to prevent shorts.

Dashboard Installation

Installation Opening

The unit can be installed in any dashboard having an opening as shown at right. The dashboard should be 4.5 mm - 6 mm thick in order to be able to support the unit.



Installation Precautions

This product should be installed by a professional installer, if possible.

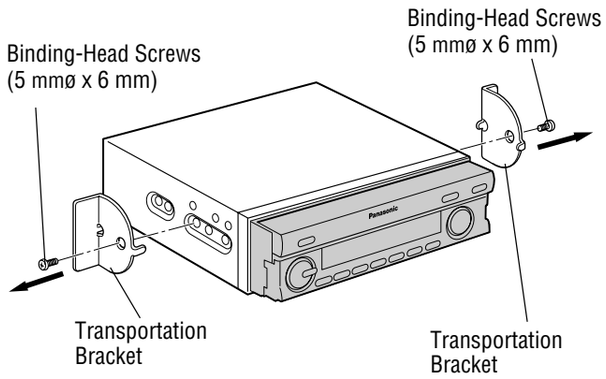
In case of difficulty, please consult your nearest authorized Panasonic Service Center.

1. This system is to be used only in a 12-volt, DC battery system (car) with negative ground.
2. Follow the electrical connections carefully (➡ page 50-63). Failure to do so may result in damage to the unit.
3. Connect the power lead after all other connections are made.
4. Be sure to connect the battery lead (yellow) to the positive terminal (+) of the battery or fuse block (BAT) terminal.
5. Insulate all exposed wires to prevent short circuiting.
6. Secure all loose wires after installing the unit.
7. Please carefully read the operating and installation instructions of the respective equipment before connecting it to this unit.

Transportation bracket removal

Be sure to remove the transportation brackets before use (installation). Use screws (5 mmø x 6 mm) with washers for installation.

Be careful not to lose these screws.



Supplied Hardware

For Installation

No.	Item	Diagram	Qty
①	Trim Plate		1
②	Mounting Collar		1
③	Mounting Spring		2
④	Mounting Bolt (5 mmø)		1
⑤	Binding-Head Screw (5 mmø x 6 mm)		2
⑥	Flat-Head Screw (5 mmø x 6 mm)		4
⑦	Binding-Head Screw (4 mmø x 3 mm)		4
⑧	Spacer		2

No.	Item	Diagram	Qty
⑨	Double-Faced Adhesive Tape (for spacer)		1set
⑩	Binding-Head Screw (5 mmø x 8 mm)		4
⑪	Tapping Screw (6 mmø x 20 mm)		4
⑫	Hex. Nut (5 mmø)		4
⑬	Mounting Bracket		2
⑭	Base Bracket		2
⑮	Double-Faced Adhesive Tape (for hide-away unit)		2
⑯	Velcro Tape		2

For Wiring

No.	Item	Diagram	Qty
⑰	Power Connector		1
⑱	Reverse Extension Cord (for rear view camera)		1
⑲	Clip Connector		1
⑳	Display Unit/Hide-away Unit Connecting Cord		1
㉑	ISO Antenna Adapter		1

Installation (continued)

Mounting the Display Unit

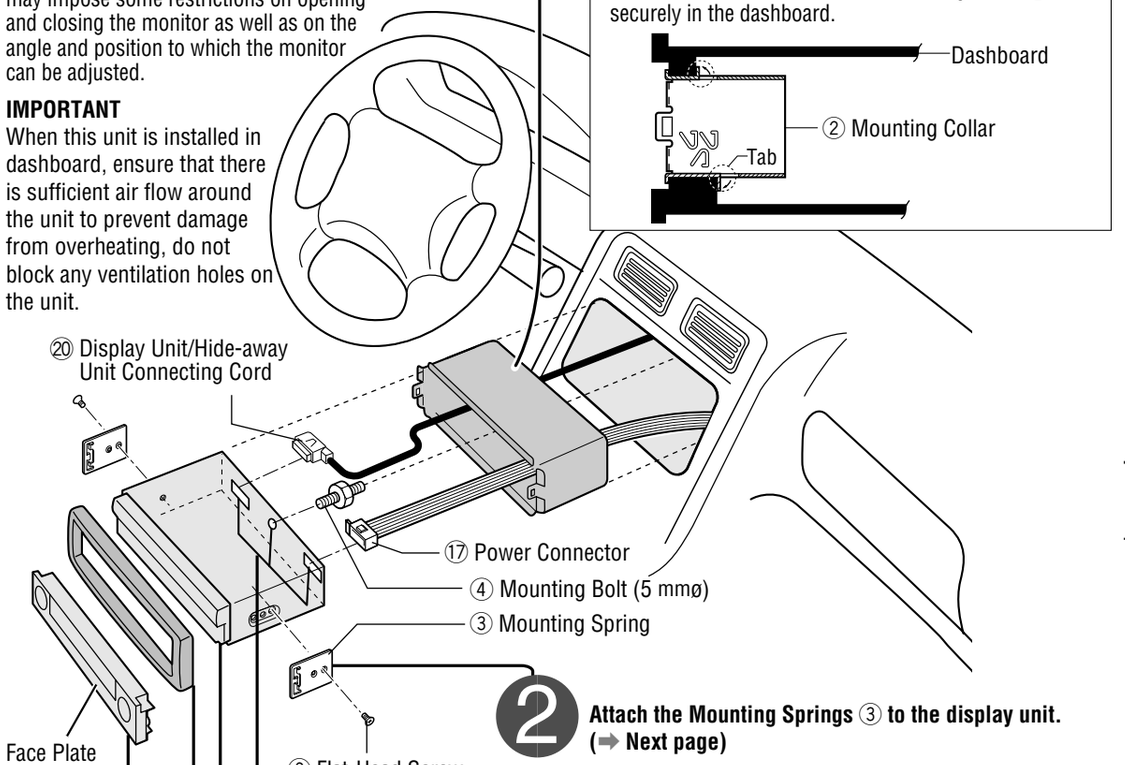
❑ Installation Procedures

(When using Mounting Collar ②)

Note: The car model, installation conditions and combination of the units used may impose some restrictions on opening and closing the monitor as well as on the angle and position to which the monitor can be adjusted.

IMPORTANT

When this unit is installed in dashboard, ensure that there is sufficient air flow around the unit to prevent damage from overheating, do not block any ventilation holes on the unit.



1 **Insert the Mounting Collar ② into the dashboard, and bend the mounting tabs out with a screwdriver.**

Fastening the Mounting Collar ②

The tabs to bent vary depending on the car. Bend them with a screwdriver to fasten the Mounting Collar ② securely in the dashboard.

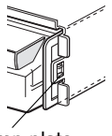
2 **Attach the Mounting Springs ③ to the display unit.**
(➡ Next page)

3 **Establish the rear connection of the unit.**

After fixing Power Connector ⑰ and Display Unit/Hide-away Unit Connecting Cord ⑳, fix the rear of the unit to the car body by either method (a) or (b) shown on the next page.

4 **Insert the unit into Mounting Collar ②**

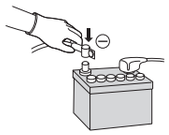
Secure the clamp plate of Mounting Collar ② to the hook of Mounting Spring ③.



5 **Insert Trim Plate ①. Then insert face plate.**

Caution: Be sure to remove the face plate before attaching or detaching the trim plate. Failure to observe this may cause damage to the unit.

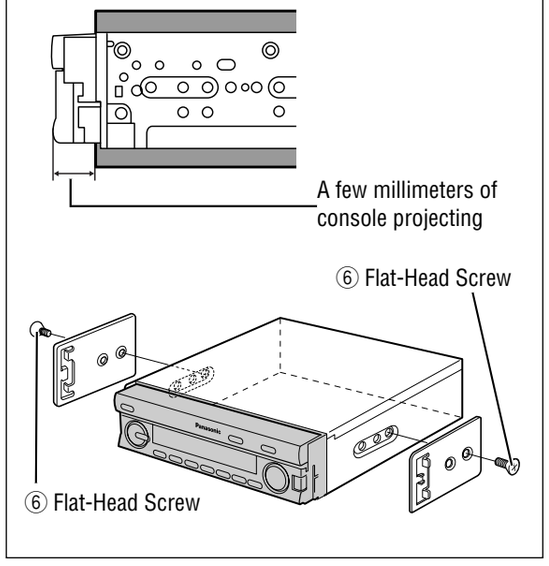
6 **After installation reconnect the negative (–) battery terminal.**



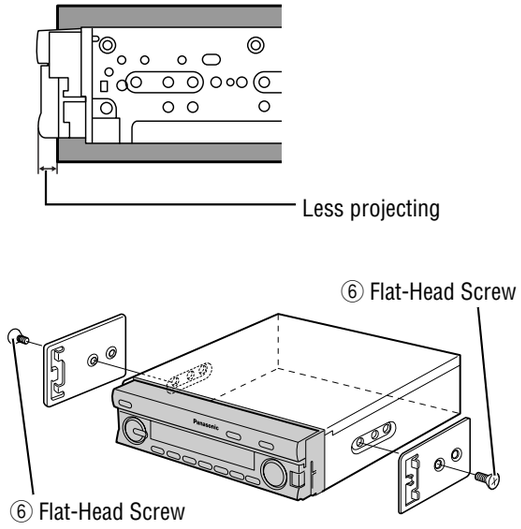
Method for Fixing the Mounting Spring

Two holes of the mounting spring allow you to select between two mounting types as shown below.

(A) Regular installation method



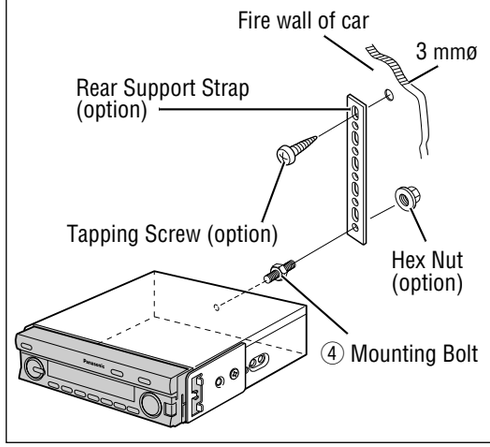
(B) Deeper installation method



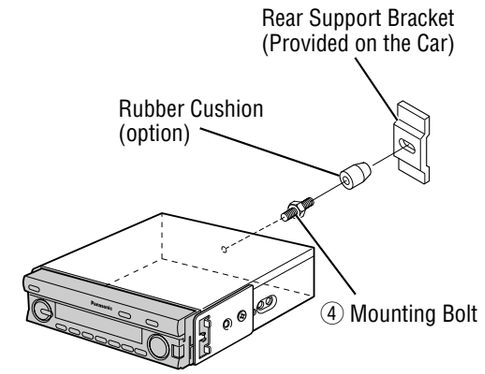
Caution: Method (B) is not available in some types of cars.

Method for Fixing the Rear of the Unit

(a) Using the Rear Support Strap (option)



(b) Using the Rubber Cushion (option)

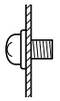
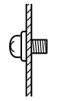
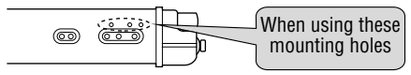


Installation (continued)

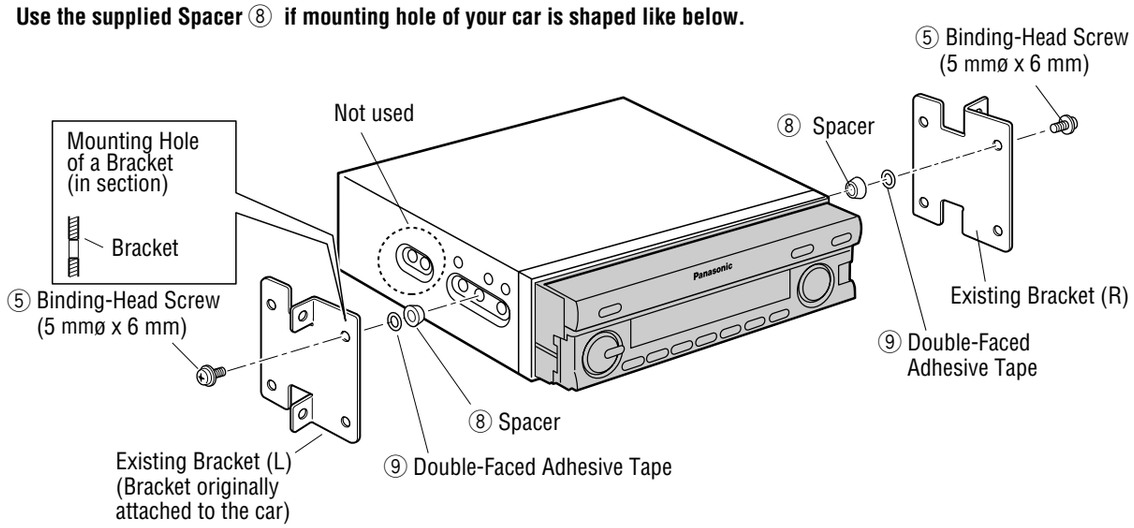
❑ Installation Procedures (When not using Mounting Collar ②)

Use the brackets supplied with your car when mounting this unit. The bracket shape and mounting method vary with car manufacturers, car types and manufacturing year. Please consult your nearest dealer or installer.

Select mounting screws according to the hole positions and hole shape of the bracket.

	⑤ Binding-Head Screw (5 mmø x 6 mm) 2 pieces Recycle the Binding-Head Screws that fixed the transportation brackets for two more positions.
	⑦ Binding-Head Screw (4 mmø x 3 mm) 4 pieces 
	⑥ Flat-Head Screw (5 mmø x 6 mm) 4 pieces

Use the supplied Spacer ⑧ if mounting hole of your car is shaped like below.



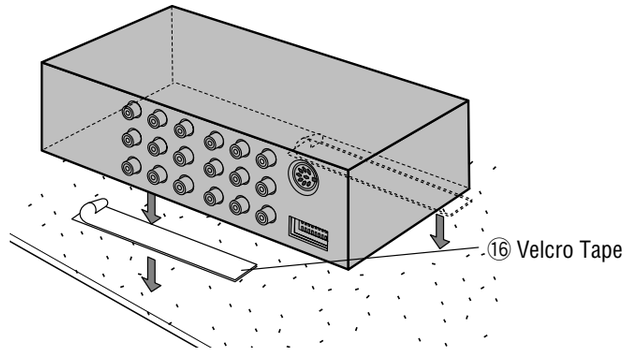
Mounting the Hide-away Unit

Cautions:
- Never mount the unit in any of the following locations to avoid damage due to overheating;
  1. Near the heater port.
  2. Places like the dashboard or rear deck, where it may be exposed to direct sunlight.
- Do not mount the unit near the door, where it could be exposed to rain.

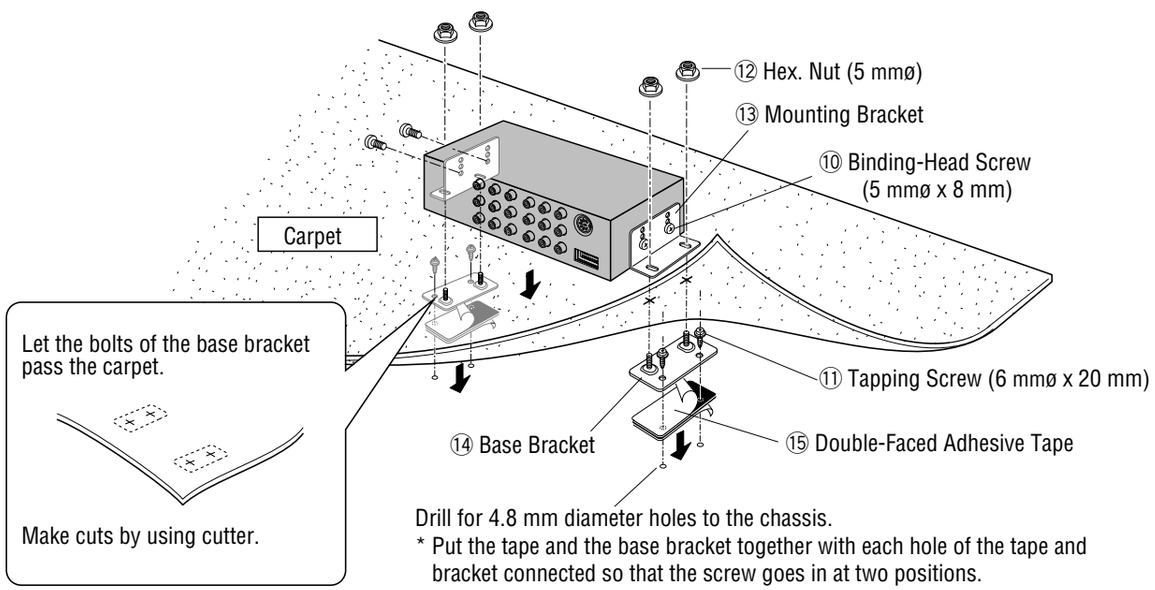
❑ Mount the unit on the car carpet by using Velcro Tape ⑯.

Attach the seal side of the Velcro Tape ⑯ to the hide-away unit, then mount the unit on the carpet.

Note: Some carpet materials may not be suitable for this mounting method. In this case, please contact your nearest Panasonic Service Center for installation.



❑ Unit installation by using the Mounting Brackets ⑬ and the Base Brackets ⑭.



Note: Apply an anticorrosive to the holes and tapping screws.

Caution: You run the risk of interfering with the mounting or causing damage by drilling into the gas tank, a wiring harness, or other component.

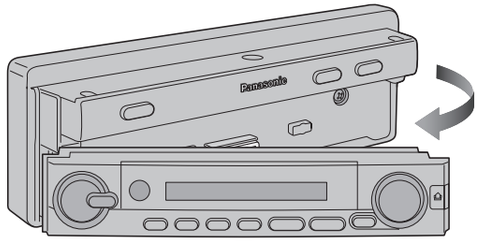
Installation (continued)

To Remove the Unit

❶ Switch off the power of the unit.

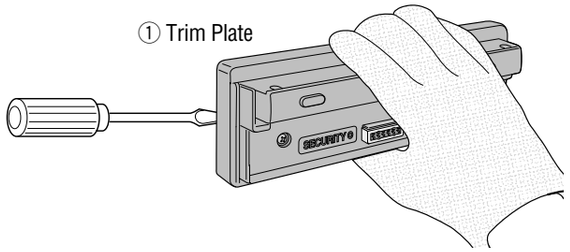
❷ Press the release button [⏏].

❸ Pull on the right side of the unit.

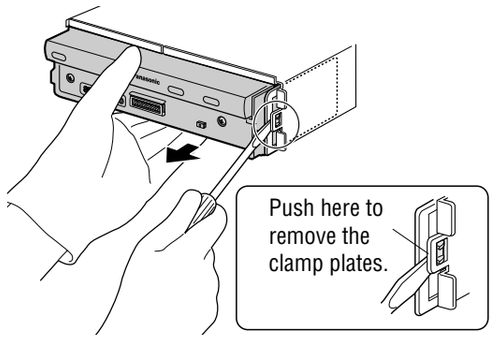


Caution: The face plate is not removable when the monitor is raised.

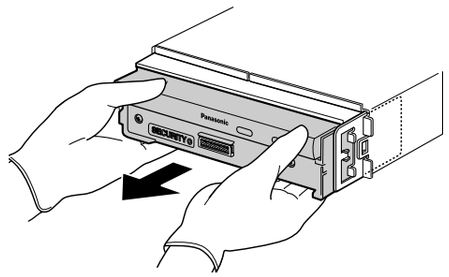
❷ Remove the Trim Plate ① with a screwdriver.



❸ Push the right and left clamp plates outward, one at a time, and pull the display unit toward yourself.



❹ After removing the right and left clamp plates, pull the unit with both hands till it comes off.



Cautions:
- Do not touch the contacts on the face plate or on the main unit, since this may result in poor electrical contacts.
- If dirt or other foreign substances get on the contacts, wipe them off with clean and dry cloth.

Anti-Theft System

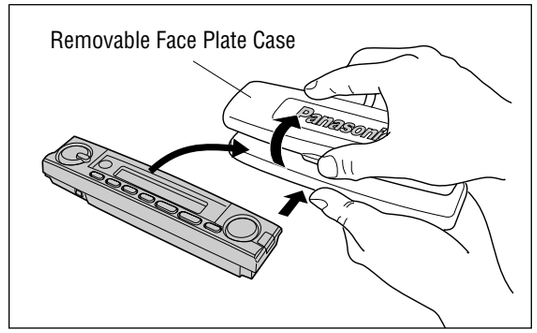
This unit is equipped with a removable face plate. Removing this face plate makes the radio totally inoperable.

Place Removable Face Plate into Case

❶ Switch off the power of the unit.

❷ Remove the removable face plate. (➡ page 48)

❸ Gently press the bottom of the case and open the cover. Place the face plate into the case and take it with you when you leave the car.

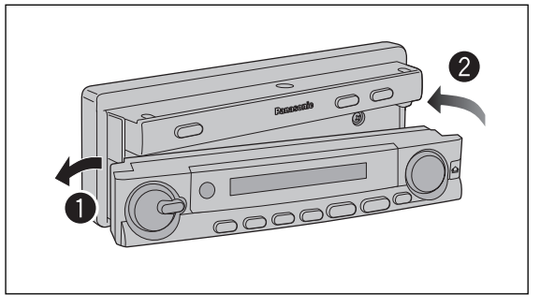


Cautions:
- This face plate is not water-proof. Do not expose it to water or excessive moisture.
- Do not remove the face plate while driving your car.
- Do not place the face plate on the dashboard or nearby areas where the temperature rises to high levels.

Install Removable Face Plate

❶ Slide the left side of the removable face plate in place.

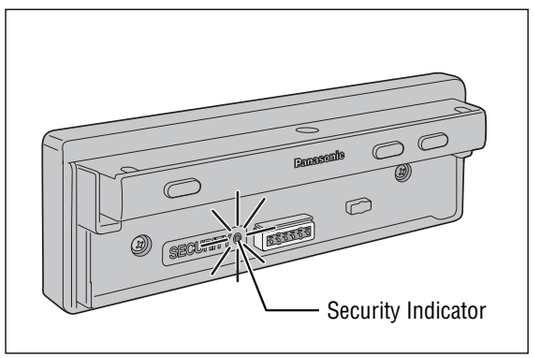
❷ Press the right end of removable face plate until “click” is heard.



Security Indicator

The security indicator blinks when the removable face plate is removed from the unit.

Preparation: Set “SECURITY LED” to ON. (➡ page 28)



Panel Removal Alarm

This alarm sounds to warn you not to forget to remove the panel before leaving your car.

“PANEL!” is displayed and an alarm sounds when turning off the power of this unit or turning the ignition switch of your car to OFF.

Electrical Connections

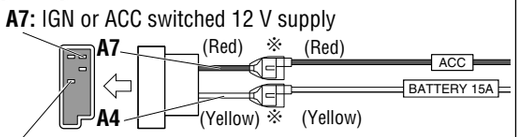
Cautions:
- Check the connectors provided on your car (see precaution below) before connecting the system.
- This unit is designed for use in a car having a 12-volt negative ground battery system.
- To prevent damage to the unit, be sure to follow the connection diagram.
- Strip about 5 mm of the lead ends for connection (only non-ISO connector cords).
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires to prevent short circuiting with the car chassis. Bundle all cables, and prevent cable terminals from touching any metal parts.

Precautions (ISO Connector)

- The pin arrangement of the power connector conforms to ISO standard.
- The pin arrangement of ISO connectors in some cars may differ from the ISO standard.
- Please check that the pin arrangement of the connector in your car conforms to ISO standard.
- For car types A and B, change the wiring of the red and yellow leads as shown at below.
- After connection, insulate the portions marked (※) with insulating tape.

Note: For cars other than types A and B, please consult your local car shop.

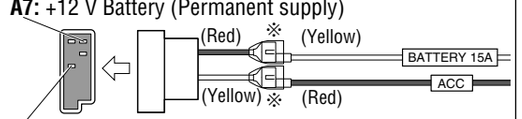
Standard ISO



A7: IGN or ACC switched 12 V supply

A4: +12 V Battery (Permanent supply)

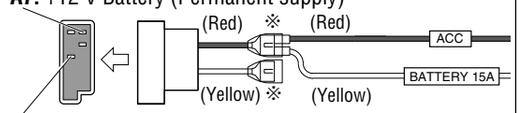
Car Type A



A7: +12 V Battery (Permanent supply)

A4: IGN or ACC switched 12 V supply

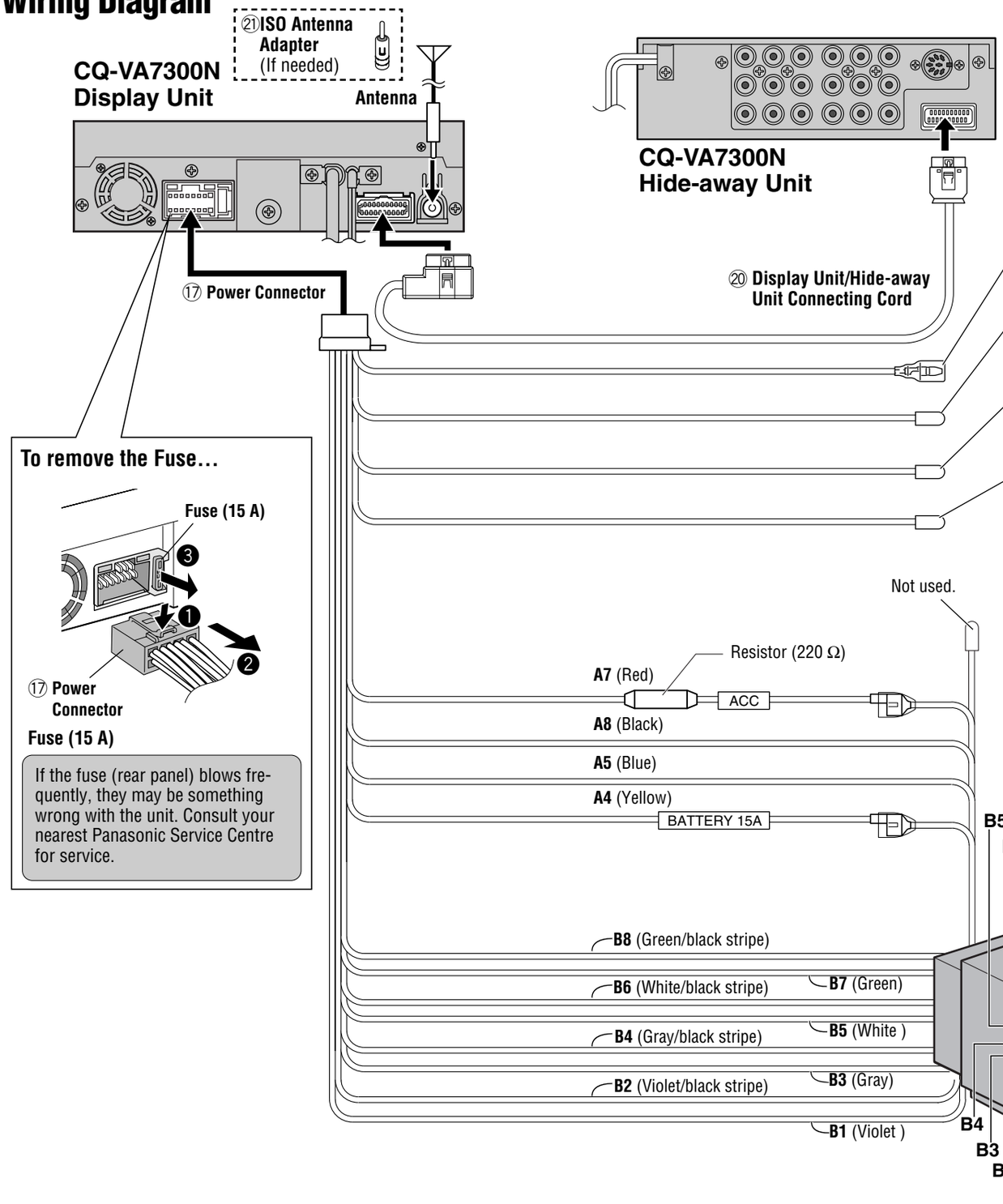
Car Type B



A7: +12 V Battery (Permanent supply)

A4: No connection

Wiring Diagram



To remove the Fuse…

Fuse (15 A)

If the fuse (rear panel) blows frequently, they may be something wrong with the unit. Consult your nearest Panasonic Service Centre for service.

Reverse Lead
(Violet/white stripe)
When connecting the rear view camera, use the reverse lead.

Side Brake (Parking Brake) Connection Lead
(Blue/yellow stripe)
Be sure to wire the side brake (parking brake) for safety and preventing accidents.

External Remote Control Lead
(Brown/black stripe)
When using non-Panasonic external remote control, refer to the manufacture for their product before connecting.

External Amplifier Control Power Lead
(Blue/white stripe)
To an external amplifier.

Speakers

B8 : Rear Left –	**B4 : Front Right –**
B7 : Rear Left +	**B3 : Front Right +**
B6 : Front Left –	**B2 : Rear Right –**
B5 : Front Left +	**B1 : Rear Right +**

Cautions:
- Use ungrounded speakers only. Allowable input : 50 W or more Impedance : 4 – 8 Ω
- Distance between speaker and amplifier: 30 cm or more
- Do not connect more than one speaker to one set of speaker leads. (except for connecting to a tweeter)

A8 : Ground Lead (Black)
To a clean, bare metallic part of the car chassis.

A7 : Power Lead (ACC or IGN) (Red)
To ACC power, +12 V DC.

A4 : Battery Lead (Yellow)
To the car battery, continuous +12 V DC.

A5 : Motor Antenna Relay Control Lead
(Blue)
To Motor Antenna (Max. 500 mA).
This lead is not intended for use with a switch actuated power antenna.

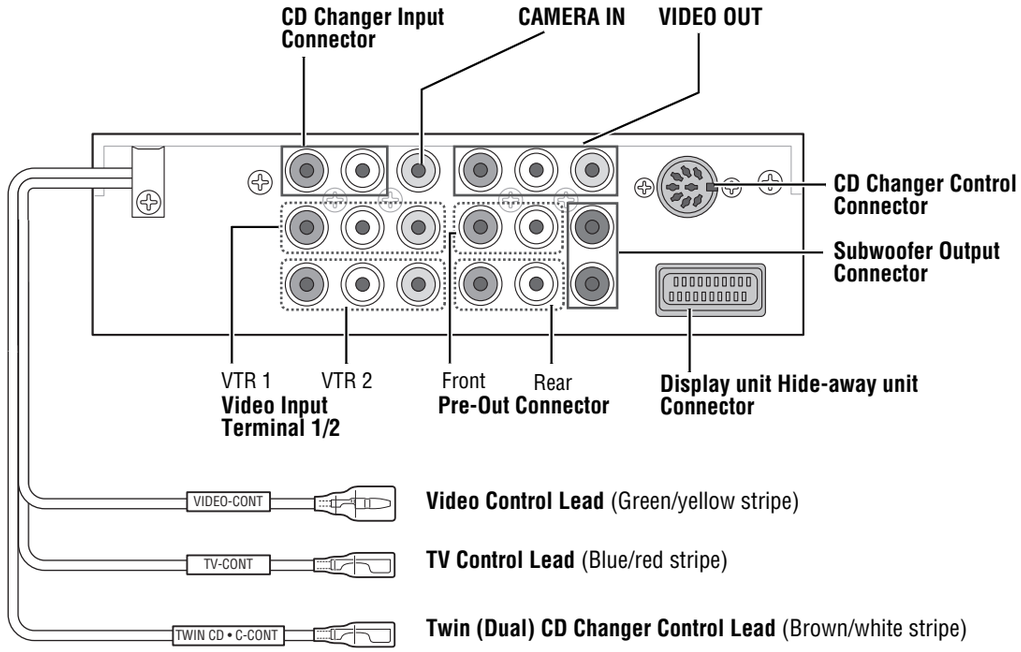
Note: The power antenna extends automatically **when the power of this unit is turned on**.

Electrical Connections (continued)

Names and Colors of Connectors

Hide-away Unit

(R) (Red), (L) (White), (VIDEO) (Yellow), (SUBWOOFER) (Black)

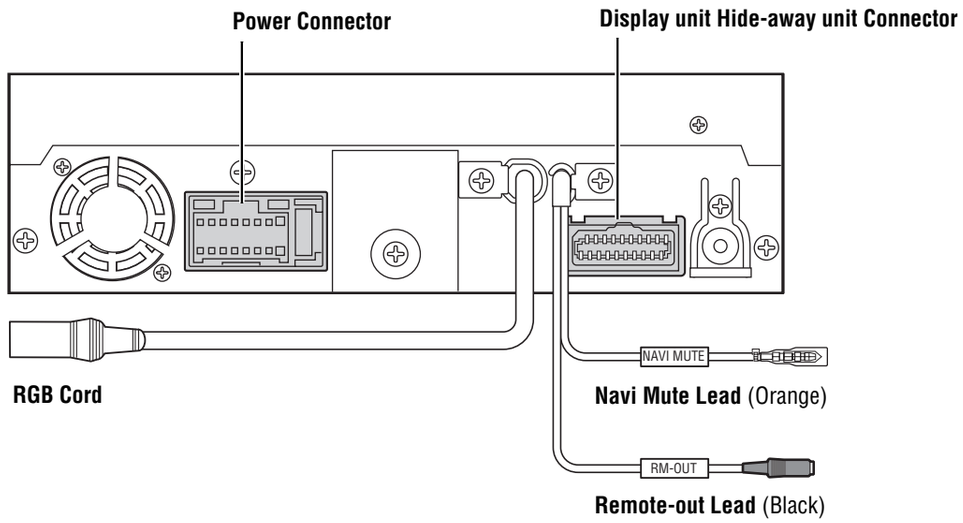


Video Control Lead (Green/yellow stripe)

TV Control Lead (Blue/red stripe)

Twin (Dual) CD Changer Control Lead (Brown/white stripe)

Display Unit



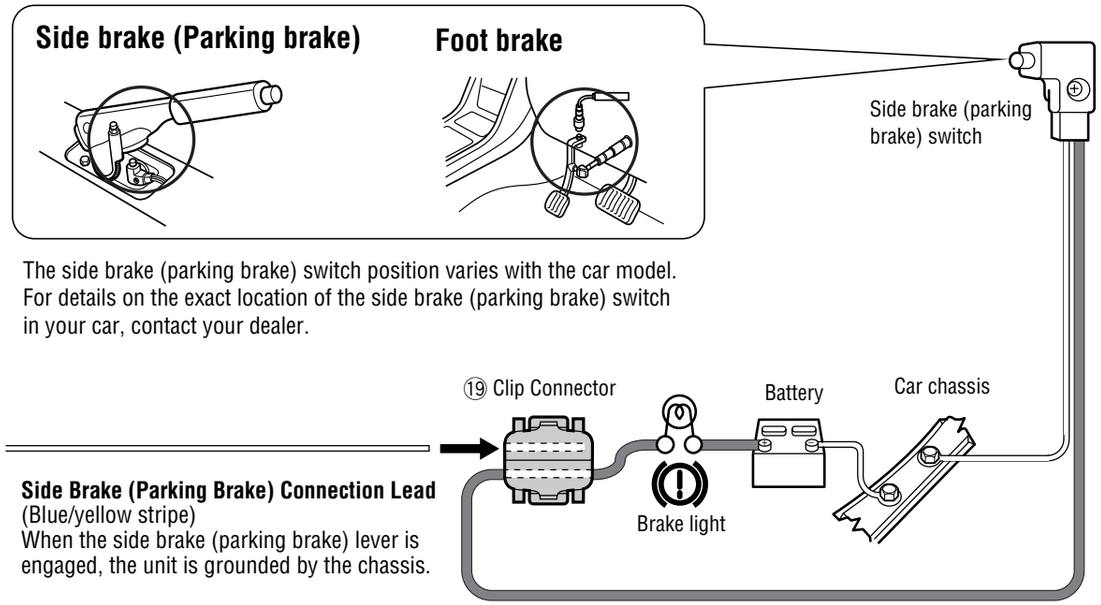
RGB Cord

Navi Mute Lead (Orange)

Remote-out Lead (Black)

Connecting the Side Brake (Parking Brake) Connection Lead

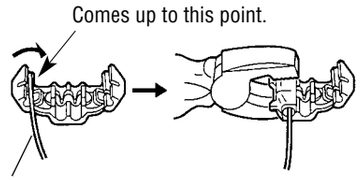
Caution: For safety, be sure to ask your nearest professional installer to do this connection.



The side brake (parking brake) switch position varies with the car model. For details on the exact location of the side brake (parking brake) switch in your car, contact your dealer.

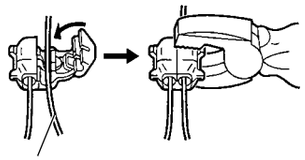
Side Brake (Parking Brake) Connection Lead (Blue/yellow stripe)
When the side brake (parking brake) lever is engaged, the unit is grounded by the chassis.

❶ Attach a Clip Connector ⑲ to the end of the side brake (parking brake) connection lead.



Side Brake (Parking Brake) Connection Lead (Blue/yellow stripe)

❷ The Clip Connector ⑲ is connected to the power source side lead of the side brake (parking brake) lever.

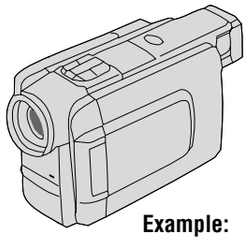


Electrical Connections (continued)

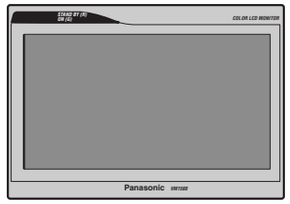
Connection with Rear Monitor and Camcorder

Connection with a camcorder (option) and rear monitor (e.g. CY-VM1500EX, option).
Note: Refer to the operating instructions for the connected devices, in addition.

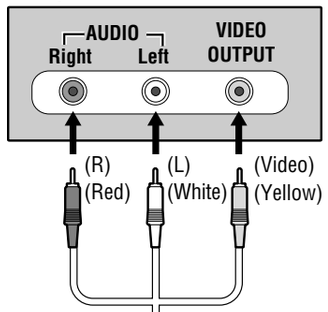
Camcorder
(option)



Rear Monitor
(e.g. CY-VM1500EX, option)

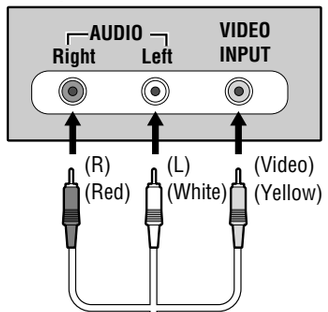


Example:

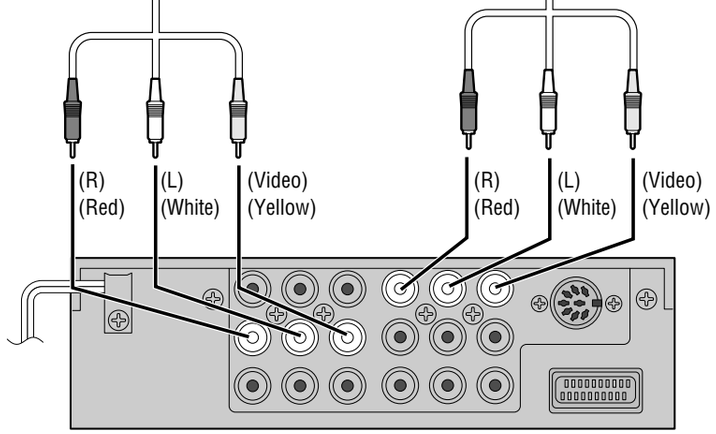


RCA Cord
(option)

Example:



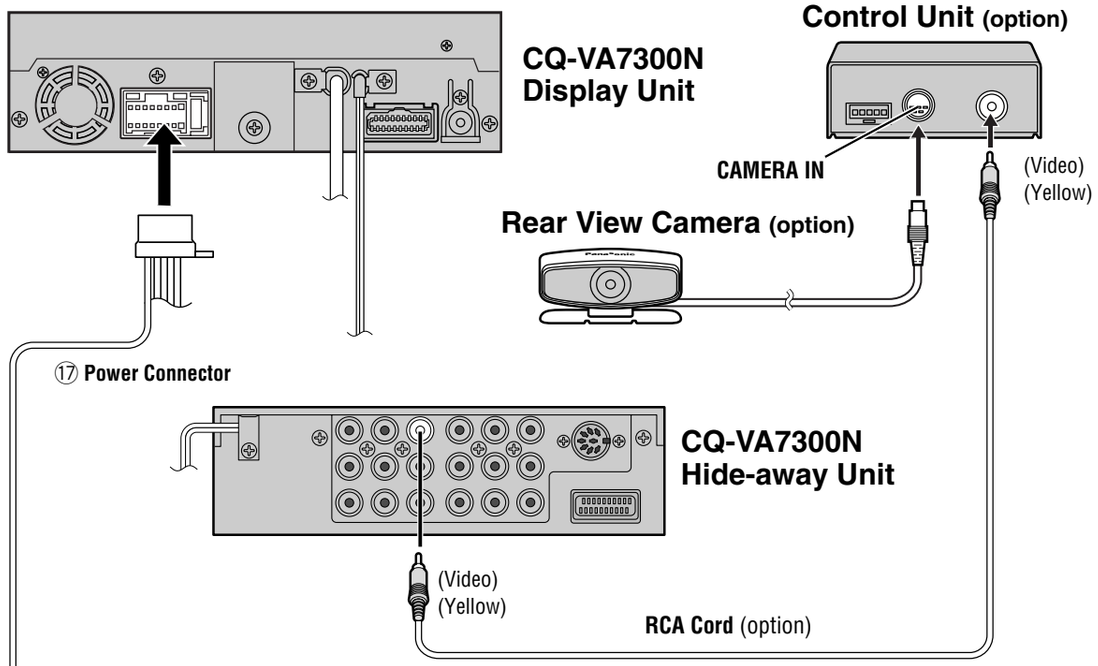
RCA Cord
(option)



CQ-VA7300N
Hide-away Unit

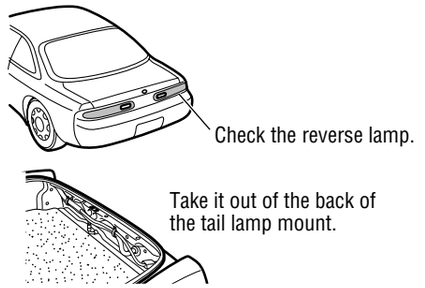
Connection with Rear View Camera

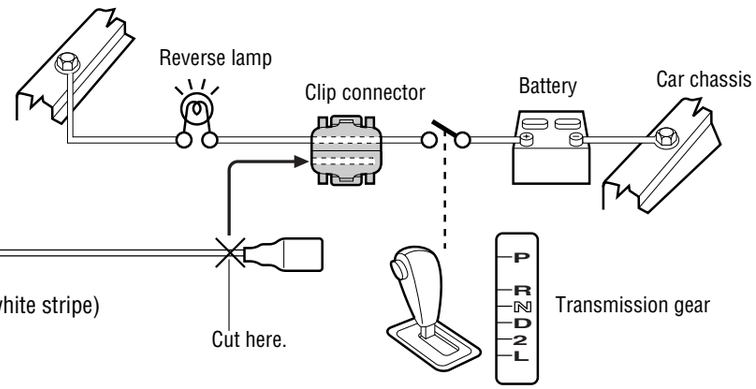
Note: Refer to the operating instructions for the connected devices, in addition.



Connecting the Reverse Lead

If using an optional rear view camera, the reverse lead must be connected.
Connect the reverse lead (violet/white stripe) to the positive (+) lead of the reverse lamp (the lamp with a clear lens that lights when the transmission gear is shifted into the reverse position).
Notes:
- Connect the reverse lead after cutting the terminal at the end.
- Use a Reverse Extension Cord ⑱ if needed.

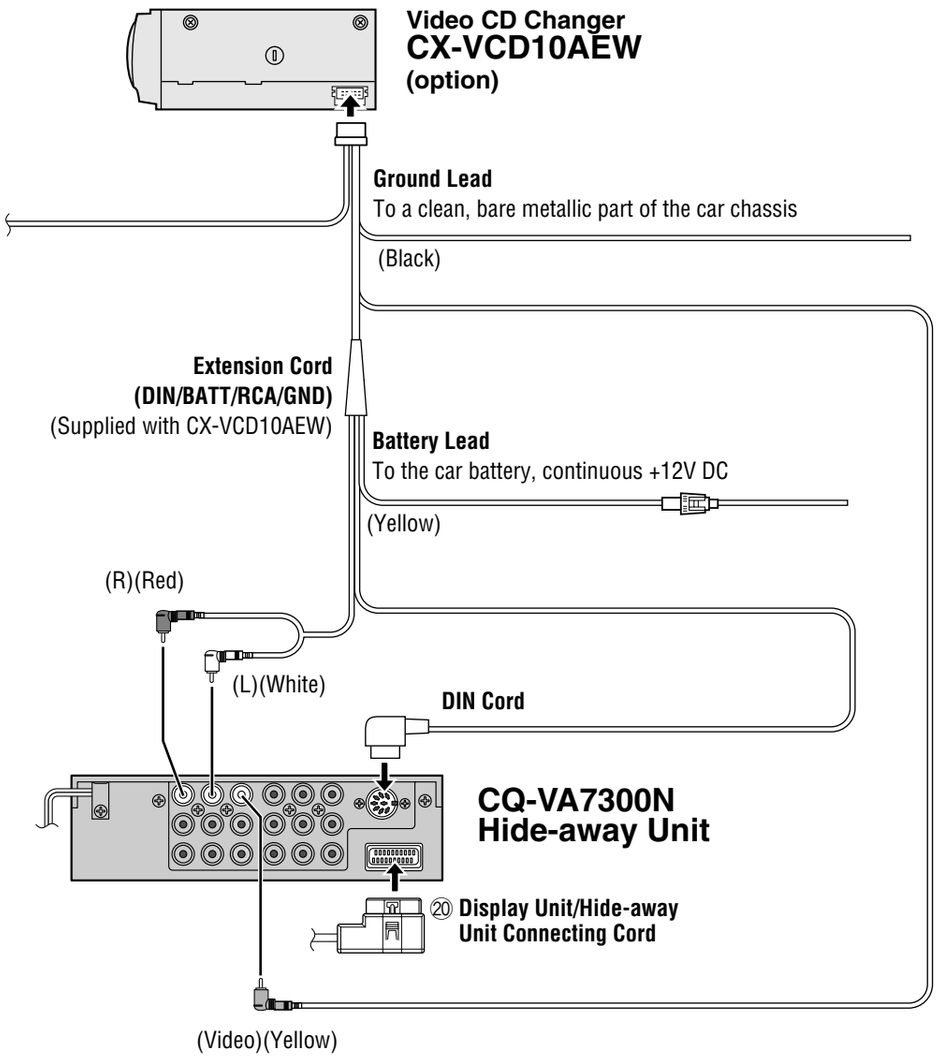




Electrical Connections (continued)

Connection with Video CD Changer (CX-VCD10AEW)

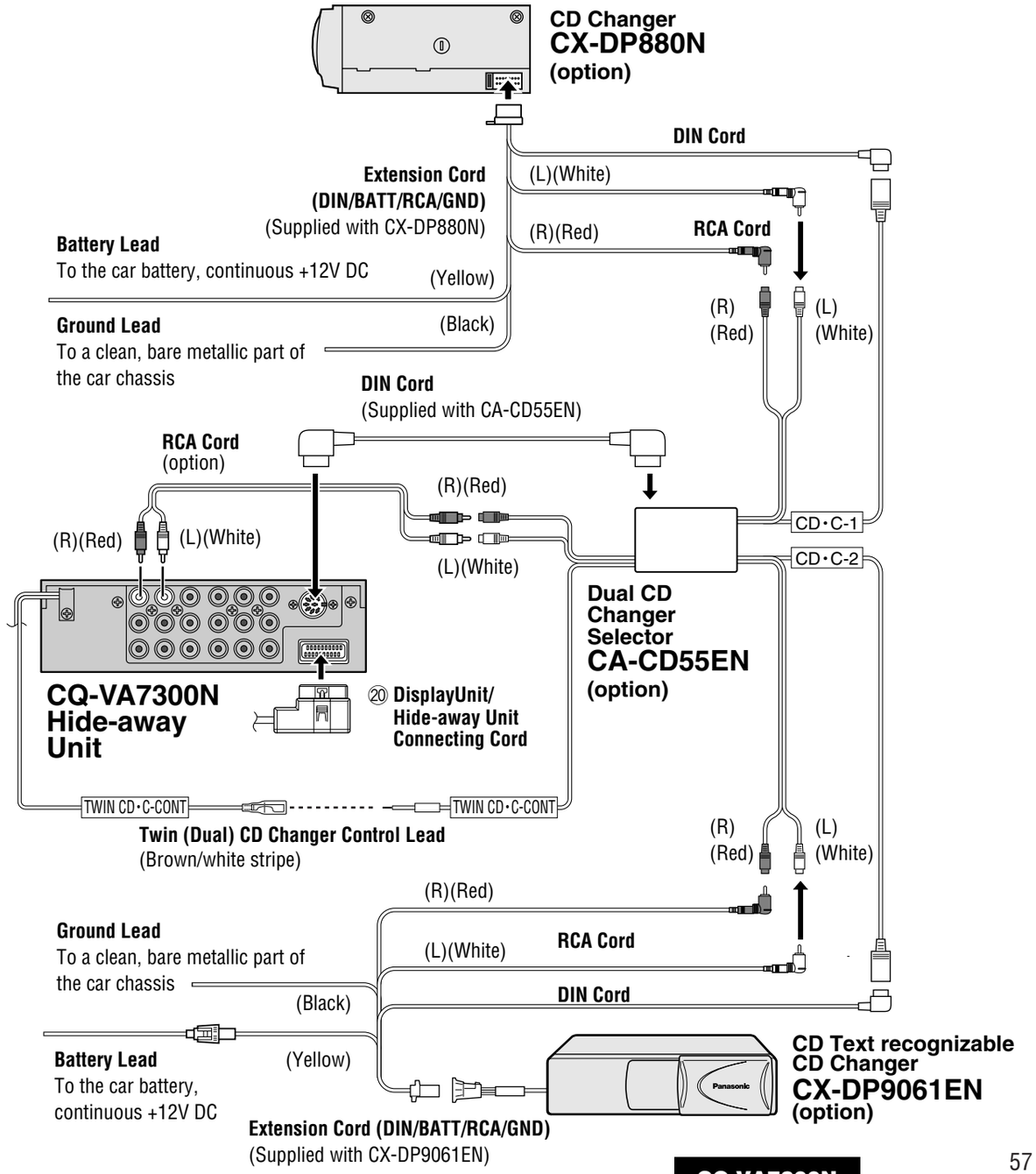
Connection with Video CD Changer (CX-VCD10AEW, option).
Note: Refer to the operating instructions for the connected devices, in addition.



Connection with Dual CD Changer Selector (CA-CD55EN)

Connection with CD Changer (CX-DP880N, option) and CD Text recognizable CD Changer (CX-DP9061EN, option).

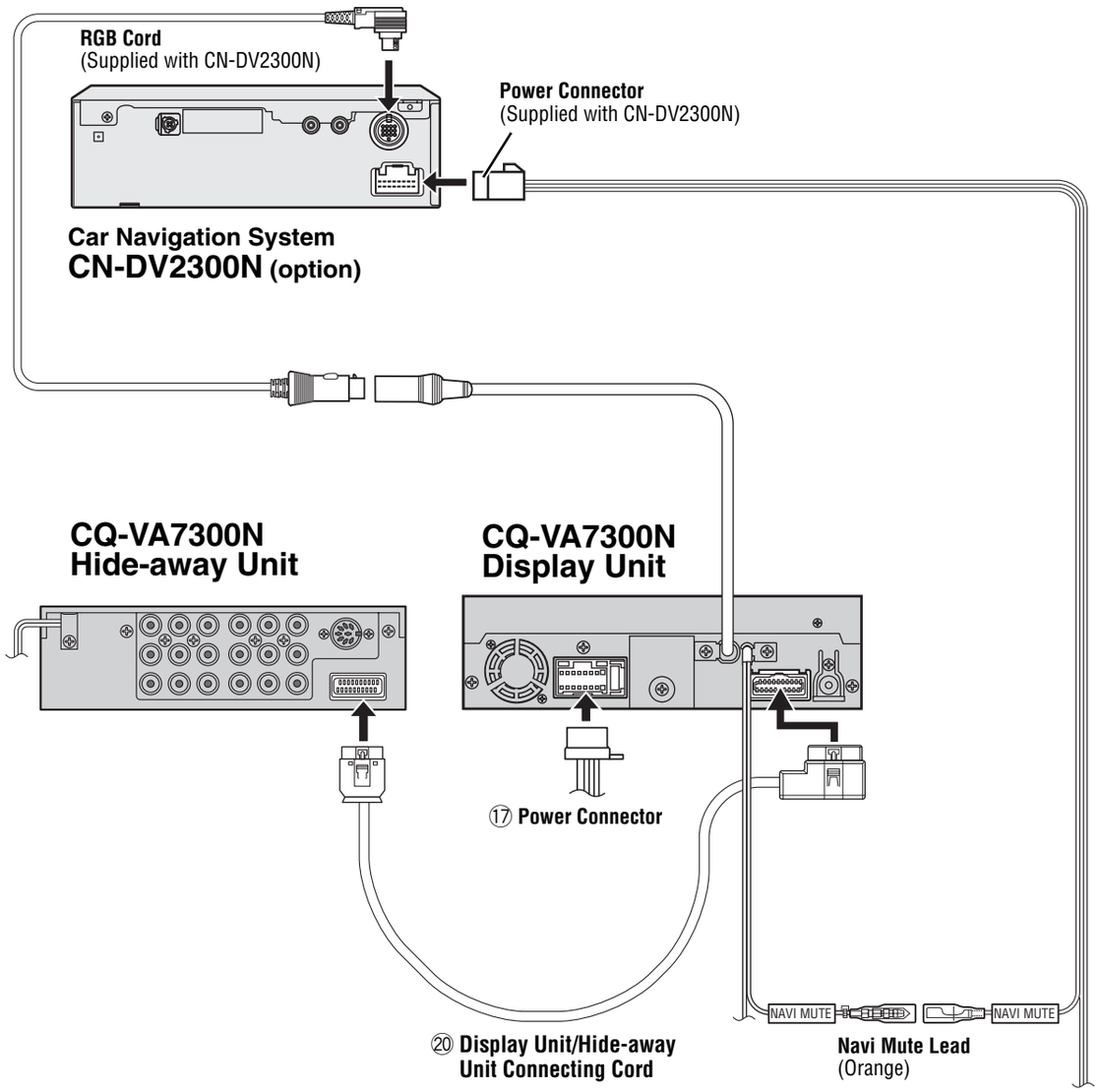
Notes:
- To connect two CD Changers, the optional dual CD Changer selector (CA-CD55EN) is necessary.
- Refer to the operating instructions for the connected devices, in addition.
- Either of CD Changer (CX-DP880N, option) and CD TEXT Recognizable CD Changer (CX-DP9061EN, option) can be replaced by Video CD Changer (CX-VCD10AEW, option).



Electrical Connections (continued)

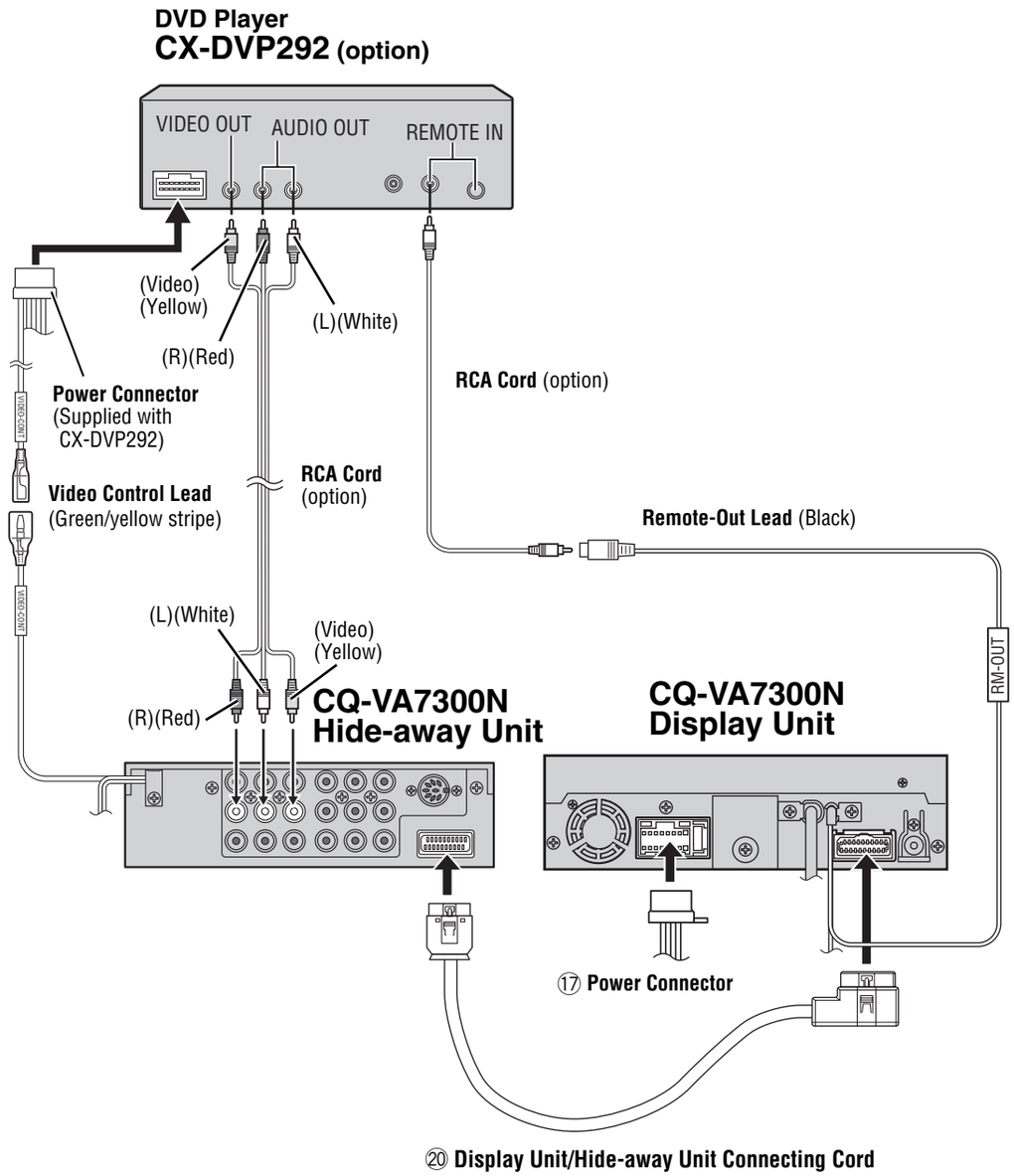
Connection with Car Navigation System (CN-DV2300N)

Connection with Car Navigation System (CN-DV2300N, option).
Note: Refer to the operating instructions for the connected devices, in addition.



Connection with DVD Player (CX-DVP292)

Connection with DVD Player (CX-DVP292, option).
Note: Refer to the operating instructions for the connected devices, in addition.

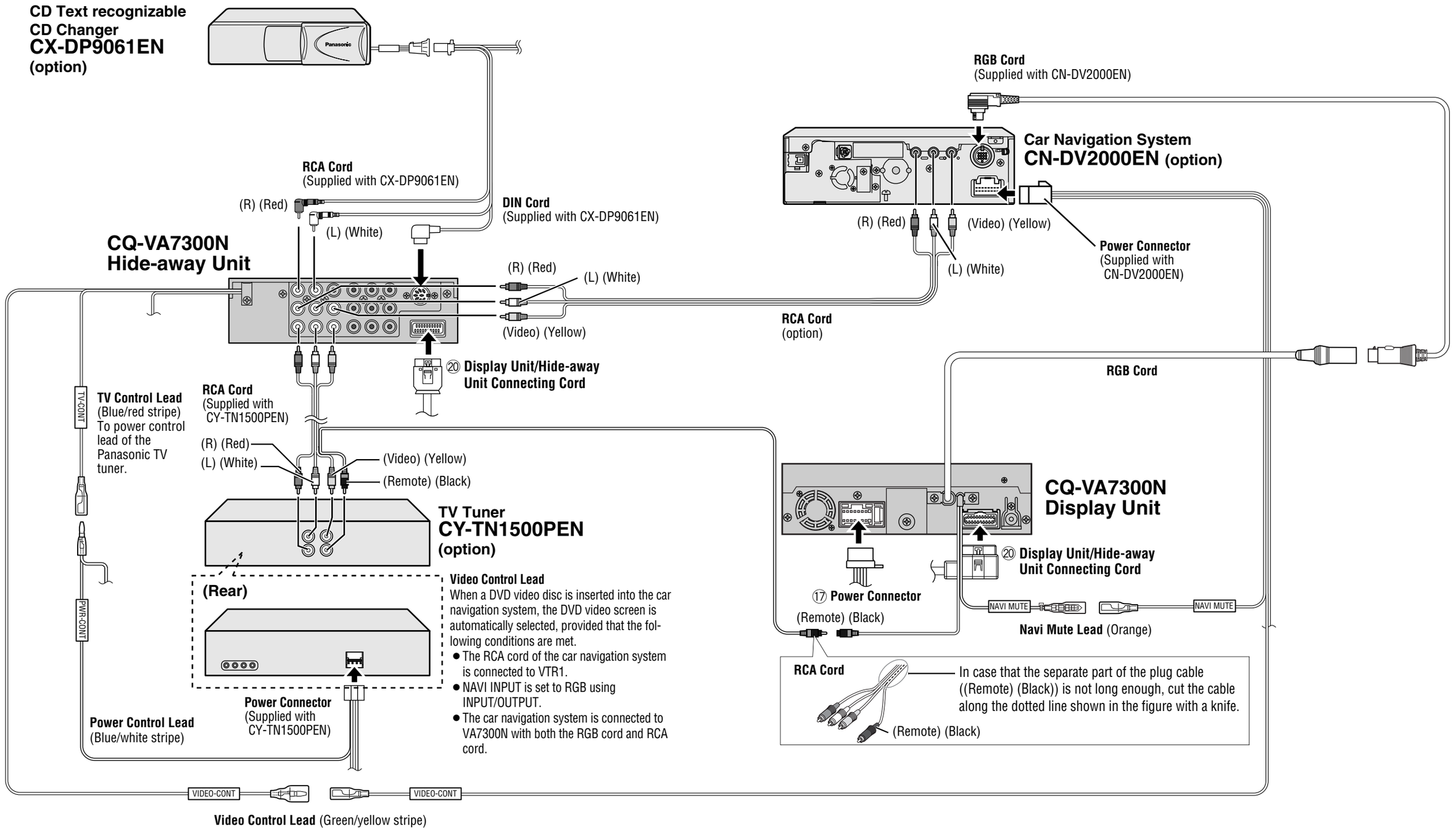


Electrical Connections (continued)

Advanced System 1

Connection with CD Changer (CX-DP9061EN, option), TV Tuner (CY-TN1500PEN, option), and Car Navigation (CN-DV2000EN, option).

Note: Refer to the operating instructions for the connected devices, in addition.

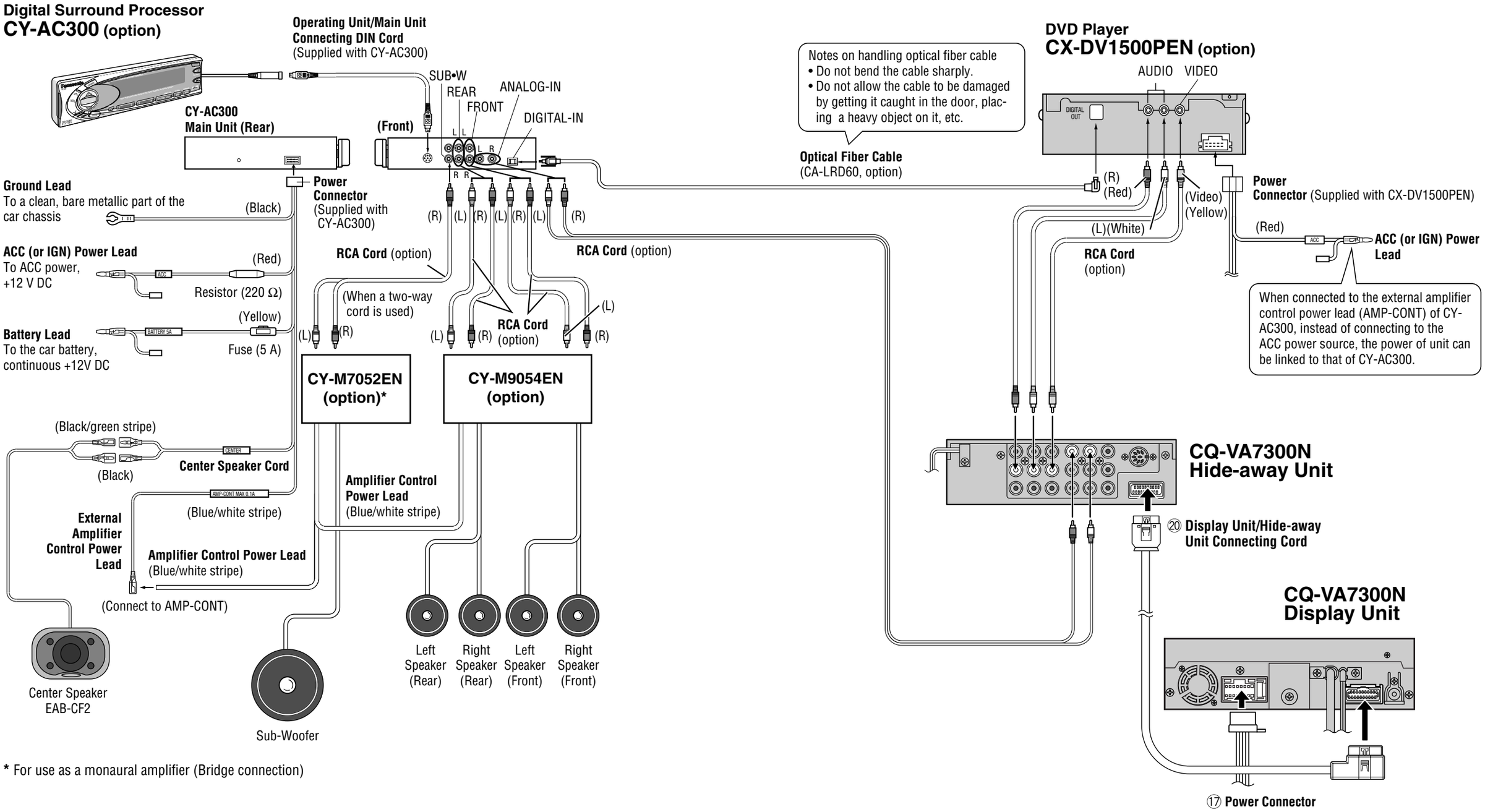


Electrical Connections (continued)

Advanced System 2

Connection with DVD Player (CX-DV1500PEN, option), Digital Surround Processor (CY-AC300, option), and Power Amplifiers (CY-M9054EN and CY-M7052EN, option).

Note: Refer to the operating instructions for the connected devices, in addition.



* For use as a monaural amplifier (Bridge connection)

Troubleshooting

If You Suspect Something Wrong

Check and take steps as described below.

If the described suggestions do not solve the problem, it is recommended to take the unit to your nearest authorized Panasonic Service Center. The product should be serviced only by qualified personnel.

Cautions:
- Do not use the unit in an irregular condition, for example, without sound, or with smoke or foul smell, which can cause ignition or electric shock. Immediately stop using the unit and call the store where you purchased it.
- Never try to repair the unit by yourself because it is dangerous to do so.

Common

Trouble	Cause / Step
No power	Car's ignition switch is not on. ➡**Turn your car's ignition switch to ACC or ON.**
	Cables are not correctly connected. ➡**Connect cables correctly.** **Battery cable: connection to the terminal that is always live** **Accessory cable: connection to the car ACC source** **Grounding wire: connection to a metal part of the car**
	Fuse is burnt. ➡**Call the store where you purchased the unit, or your nearest Panasonic Service Center.**
No sound	The volume is adjusted to zero. ➡**Raise the volume.**
	Mute is set to ON. ➡**Set it to OFF.**
	Cables are not correctly connected. ➡**Connect cables correctly.**
Only sound, no picture.	Side brake (parking brake) connection lead is not correctly connected. ➡**Connect the side brake connection lead correctly.**
	You did not pull the side brake (parking brake) lever. ➡**Pull the side brake (parking brake) lever.**
Noise **Picture is not clear.**	A mobile phone is used near the unit. ➡**Keep the mobile phone away from the unit.**
	The unit's grounding wire is not connected securely. ➡**Check the metal areas of the car body (chassis), and connect the grounding wire more securely.**
	Selection of PAL or NTSC is not properly executed. ➡**Identify the connected system, NTSC or PAL, and execute setting from "INPUT/OUTPUT" in the menu, "USER", in accordance with the connected system. (➡ page 24)**

Monitor

Trouble	Cause / Step
The tilt angle or the front-rear position of the display is not adjustable.	There is an obstacle. ➡**Install the unit where the unit moves freely.**
The monitor does not go back into the unit.	The monitor stops on the way to the home position. ➡**Press [⏏] (OPEN/CLOSE).**

Remote Control

Trouble	Cause / Step
Buttons are invalid for operation.	Battery Poles (+) (–) are reversed. ➡**Insert the battery correctly.**
	Wrong battery. ➡**Check the battery.**
	Battery has run down. ➡**Replace the battery.**
	Remote control is in the wrong direction. ➡**Direct the remote control at remote control sensor on the display unit.**

Sound Settings

Trouble	Cause / Step
No sound from left, right, front, or rear speaker.	Left and right balance, or front and rear balance is off on one side. ➡**Adjust BAL/FAD as appropriate (➡ page 30).**
	Cables are not correctly connected. ➡**Connect the cables correctly.**
Left and right sounds are reversed.	The right speaker lead is connected to the left speaker and the left speaker lead to the right speaker. ➡**Connect the speaker leads to the correct one.**

Troubleshooting (continued)

Car Navigation, VCR, Camcorder, Rear View Camera, Rear Monitor

Trouble	Cause / Step
The picture from a car navigation system is not displayed.	The connection of a car navigation system is not correct. ➡**Connect it correctly.**
	Input setting of a car navigation system is not correct. ➡**Make the input setting correct.**
The picture from a VCR or a camcorder is not displayed.	A VCR or Camcorder is not connected correctly. ➡**Connect a VCR or Camcorder correctly.**
The picture from a rear view camera is not displayed.	A VCR or Camcorder is not connected correctly. ➡**Connect a VCR or Camcorder correctly.**
	Input setting of a camera is not correct. ➡**Make the input setting correct.**

Display Settings

Trouble	Cause / Step
The brightness of the screen is not stable.	“AUTO” dimmer is selected. ➡**Select one of the dimmer levels from among 1 to 4 to make the dimmer adjustment become free from light intensity.**
The picture is dark. The picture is whitish. Something is wrong with the picture. The picture is light in color.	The screen is not adjusted properly. ➡**Make every adjustment of the screen.**
Red, blue, or green spots appears.	This is a characteristic of liquid crystal panels and is not defective.

Radio

Trouble	Cause / Step
Too much noise in FM stereo and monaural (AM) broadcasts.	Station is too far, or signals are too weak. ➡**Select other stations of higher signal level.**
	The radio antenna is not extended enough. ➡**Extend the radio antenna enough.**
	The motor antenna relay control lead is not connected correctly. ➡**If there is a motor antenna in the car, connect the motor antenna relay control lead to the motor antenna lead that is installed in the car correctly.**
	The ground connection of the radio antenna is not secure enough. ➡**Check the ground connection of the mounted base part of the antenna, and tighten up the screw.**
Preset station is reset.	Battery cable is not correctly connected. ➡**Connect the battery cable to the terminal that is always active.**

Error Display Messages

CD Changer

Display	Cause / Step
- E1 -	Disc is dirty, or is upside down. ➡**Check disc.**
- E2 -	Disc has scratches. ➡**Check disc.**
- E3 -	No operation by some cause. ➡**Eject the magazine. If failure persists, press the reset switch on the CD changer. If normal operation is not restored, call the store where you purchased the unit or the nearest Panasonic Service Center.**
NO DISC	No disc is in the magazine. ➡**Insert discs into the magazine.**
NO MAGAZINE	No magazine is in the changer. ➡**Load the changer with CD-loaded magazine.**

Notes:

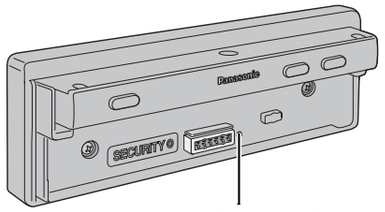
- There may be cases when the disc numbers affected by an error are displayed before E1 and E2.
- Displays and the steps to be taken for errors vary in part from changer to changer. For details, refer to the Operating Instructions for the changer used.

Troubleshooting (continued)

If the Unit Malfunctions...

Preparation: Remove the face plate. (➡ page 48)

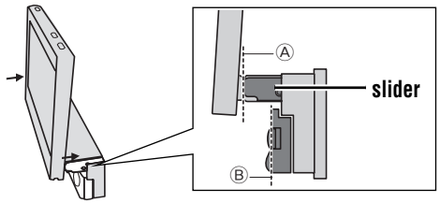
Reset switch
Insert a hard, slender stick into the hole and push the switch.
Push the switch only when the unit fails to operate with any buttons. (Stored settings and adjustments are not cleared.)
If the unit fails to return to normal condition, call the nearest Panasonic Service Center and ask for repairs.



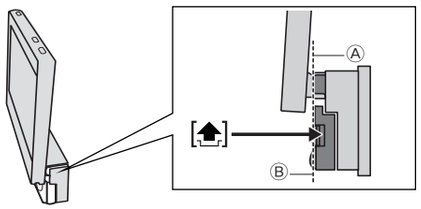
In case that the unit is shut down at the monitor raised...

The face plate cannot be removed when the monitor is raised. Therefore, follow the procedure below.

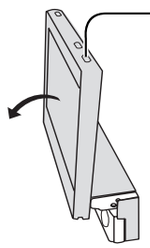
❶ Hold the lower part of the monitor with both hands and push it toward the main unit slowly.



❷ Push the monitor until Ⓐ of the slider is flush with Ⓑ of the face plate, move your hands off the monitor and press **[⏏]**.



Notes:
- Refer to "To Remove the Unit" as well. (➡ page 48)
- In case of having difficulty in pushing the monitor because of the dashboard or others, perform the preceding steps after holding the lower part of the monitor with both hands and tilting the monitor toward you slowly. (➡ fig. below)
- Leave the monitor slid until putting the face plate back on.
- Press **[⏏](OPEN/CLOSE)** after restoring it. (➡ fig. below)



Caution: Be sure to hold the lower part of the monitor with both hands and move it slowly without applying undue force.

Maintenance

■ Clean dirt by wiping lightly with a soft cloth

When the unit is dirty, wipe the surface of the display using the Wiping Cloth (supplied).

Note: Do not scratch the screen with your nails or other hard objects. The resulting scratches or marks will obscure the images.

■ Without a Wiping Cloth

When the unit is dirty, wipe with a well-wrung cloth dipped in liquid dish washing detergent (neutral) diluted with water and then go over the same surface with a dry cloth.
(Since there is the possibility of water drops getting inside of the unit, do not directly apply cleanser to the surface.)

Cautions:
- If water drops or similar wet substances get inside the monitor, it may cause a malfunction.
- Never use solvents such as benzine, thinner as they may mar the surface of the unit.

Specifications

General		Display Unit	
Power Supply	: 12 V DC (11 V - 16 V), test voltage 14.4 V negative ground	Liquid Crystal Panel	: 7 inches wide
Current Consumption	: 2.5 A (modulation frequency of 400 Hz, percentage modulation of 30% at FM standard output)	Screen Dimensions	: 156 (W) x 87 (H) x 178 (D) mm
Maximum Power Output	: 50 W x 4 (at 4 Ω)	Number of Pixels	: 336,960 pixels (234 vertical x 480 horizontal x 3)
Power Output	: 18 W x 4 (DIN45 324, at 4 Ω)	Valid Pixel Ratio	: over 99.99 %
Speaker Impedance	: 4 - 8 Ω	Display Method	: Transparent color filter format
Audio Input Sensitivity	: 2.0 Vrms (VTR)	Drive Method	: TFT (Thin Film Transistor) active matrix format
Pre-output Voltage	: 5.0 V (CD Changer Play Mode; 1 kHz 0 dB)	Light Source	: Internal light (built-in small fluorescent lamp)
Pre-output Impedance	: 60 Ω	**Radio**	
Sub-Woofer Output Voltage	: 5.0 V	**FM Stereo Radio**	
Sub-Woofer Output Impedance	: 60 Ω	Frequency Range	: 87.5 - 108 MHz
Video input signal	: Composite video signal, 1.0 Vp-p (75 Ω)	Usable Sensitivity	: 8 dB/µV (S/N 30 dB)
Video output signal	: Composite video signal, 1.0 Vp-p (75 Ω)	Stereo Separation	: 35 dB (at 1 kHz)
Dimensions		**MW Radio**	
Display Unit	: 178 (W) x 50 (H) x 165 (D) mm	Frequency Range	: 531 - 1,602 kHz
Hide-away Unit	: 178 (W) x 50 (H) x 150 (D) mm	Usable Sensitivity	: 28 dB/µV (S/N 20 dB)
Weight		**LW Radio**	
Display Unit	: 1.8 kg	Frequency Range	: 153 - 279 kHz
Hide-away Unit	: 0.8 kg	Usable Sensitivity	: 32 dB/µV (S/N 20 dB)

Note: Specifications and the design are subject to modification without notice due to improvements in technology.

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